Annual Public Health Report of the Province of Assam for the year 1944

BY

MAJOR T. D. AHMAD, B.A., M.B., ch. B., D P.H., D.T.M. & H.,

INDIAN MEDICAL SERVICE,

DIRECTOR OF PUBLIC HEALTH, ASSAM

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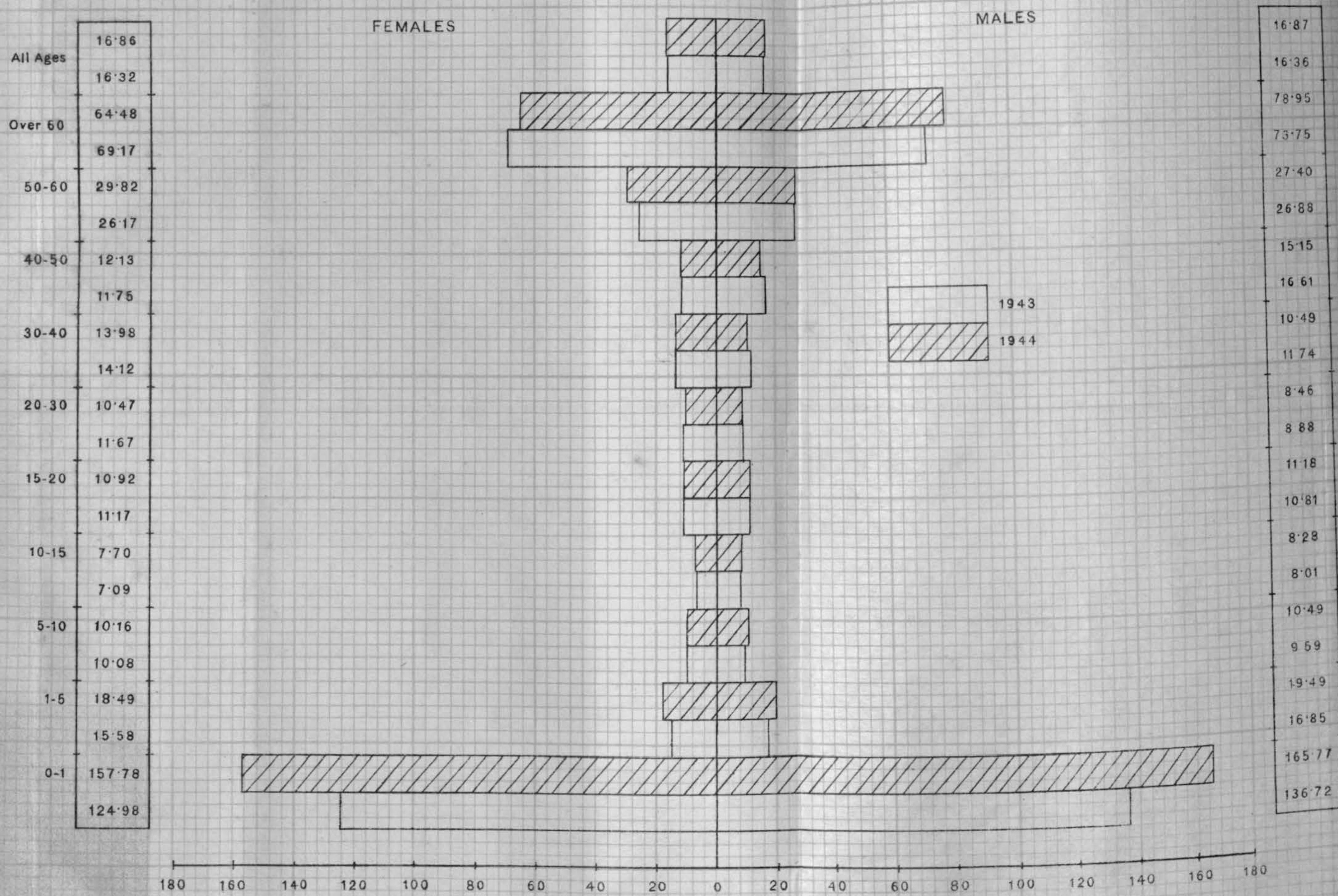
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DEATH RATES BY AGE GROUPS AND SEX

ASSAM 1944



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CHAPTER I

Meteorology, Economic Conditions, etc.

1. *Meteorology*.—Climatic conditions show marked variations in the different regions of the Province. Taking into consideration temperature, humidity and rainfall, the year may be divided into four periods—(1) cold weather period—January and February, (2) hot weather period—March, April and May, (3) monsoon period—June to September and (4) the retreating monsoon period—October to December. During 1944 average rainfall was somewhat lower and the temperatures higher than the respective normals. The statement below shows the rainfall in inches during the year, departure from normal and the actual rainfall during 1943.

Periods	Actual rainfall during 1944	Departure from normal	Actual rainfall during 1943
January and February	2·49	+0·28	3·44
March to May	25·42	+0·34	31·02
June to September	62·37	—2·90	64·18
October to December	5·90	—1·22	4·91

Local flooding occurred in Jaintia, Kanlaghat and Gobindghat areas of Sylhet district during the month of June.

2. *Economic conditions, etc*.—For a proper study of the economic conditions, it is essential to know the cost of living index and the national income. In lieu of these two indices the price of rice, which is the staple diet of the population as well as the principal commercial crop of the agriculturist, is taken into consideration for assessing the general economic conditions prevailing in the Province. The Statement below gives the average quantity of common rice sold per rupee during 1944 and the previous five years.

Districts	1939		1940		1941		1942		1943		1944	
1	2		3		4		5		6		7	
	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
Cachar	10	7	10	12	7	12	6	13	2	11	2	1
Sylhet	10	7	10	4	7	5	6	5	2	8	3	3
Goalpara... ...	10	3	9	9	6	14	7	9	2	8	2	7
Kamrup	10	3	9	13	7	10	7	1	2	6	2	8
Darrang ...	11	6	10	9	8	7	7	8	2	10	2	8
Nowgong... ...	11	11	10	3	7	10	7	3	2	10	2	7
Sibsagar	10	13	9	13	7	6	7	2	2	12	2	5
Lakhimpur ...	10	15	10	6	7	12	7	2	3	0	2	8

It will be seen that there has been a phenomenal rise in the price of common rice, but the agriculturist has unfortunately not benefitted proportionately and the middle classes with fixed incomes have suffered a great deal. But for the manipulations of the middle man and the procuring agencies, the rural populations would have benefitted by a higher income level and consequent better standard of living and health conditions. The Supply and distribution system was also inadequate. As it is, there has been no improvement in living and health conditions in the Province during the year.

CHAPTER II

Vital Statistics

3. *Registration*.—The system of registration compilation and publication of vital statistics remained the same as in previous years. The Assam Births and Deaths Registration Act of 1935 is not compulsory in rural areas, the primary agents are unpaid, mostly illiterate, indifferent and unwilling and the whole machinery for the collection of vital events in the Province needs a thorough overhaul.

4. *Population*.—This report refers mainly to the eight plains districts of the Province of which the population, according to the census of 1941, was 9,417,552. The midyear estimated population for the year 1944, based on the "Arithmetic Progression Method" was 9,914,077 (5,253,710 males and 4,660,367 females). Density of estimated population per square mile during the year was 316 as compared to 311 during 1943. The populations of the Mymensinghia immigrants and tea-garden labour, which were incorporated in the 1941 census figures, have been included in the midyear estimation. But figures of recent immigrants who have infilterated into the Province due to the Bengal famine or in connection with war projects could not be included in the estimation due to the inability of District Officers and Controller of Immigration to furnish these figures. In spite of this, the midyear estimated population, based on the Arithmetic progression method can be assumed to present the minimum possible error in population figures.

Statistical and other information in respect of the five hill districts—excluded and partially excluded areas—is shown separately.

5. *Births and Birth-Rate.*—The total number of births registered during the year was 166,276 as compared to 186,164 during 1943, showing a decrease of 19,888. The birth-rate of the Province for the year 1944 was 16·77 as compared to 19·06 of the previous year. The number of male births to every 100 female births was 110. The comparative birth-rates of the Provinces in India are shown in the following table.

Province	1944	1943	1939-43
1	2	3	4
Assam	16·77	19·06	24·80
Bengal	16·14	18·76	24·80
Bihar	20·63	20·50	29·81
Orissa	25·24	30·75	31·98
United Provinces	25·09	24·71	31·25
Madras	29·39	31·12	36·23
Bombay	33·93	35·42	36·03
Central Provinces	37·98	37·04	38·94
Punjab	36·78	32·40	37·77
N.-W.F. Province	17·17	16·94	19·56
Sind	14·94	15·00	16·87

6. *Birth Registration, General.*—The number of births per year has been declining since 1942. The following statement shows that the decrease in births has been more marked in the rural areas than in the towns.—

Year	Births in Urban areas	Births in Rural areas
1940	6,901	237,253
1941	7,373	245,708
1942	5,272	201,801
1943	4,877	181,287
1944	5,116	161,160

It will be observed that the decline in the birth-rate coincided with the onset of war and disturbed conditions, which seem to have had profound effect on family life. Another probable factor has been the general unsatisfactory conditions of supply of food articles causing almost universal under-nourishment especially amongst the rural masses. Added to these is the factor of gross inaccuracy in the registration of vital events, specially births which are more liable to be ignored by the unpaid and unwilling primary agent. But even taking into consideration the year to year variation in the degrees of inaccuracy in the registration of births, there does not seem to be any doubt that there has been an appreciable fall in the birth-rate since 1942.

As in last year, Cachar district recorded the highest birth-rate (24·27) and Kamrup district the lowest (8·77). The districts of Cachar, Sylhet, Sibsagar and Goalpara had birth-rates above the provincial average (16·77), while the remaining four districts below it. The number of males to every 100 females born was 110. The highest seasonal birth-rate was recorded in February (20·79) followed by January (19·60) and the lowest rate was recorded in July (14·10). Seasonal birth-rates bv months are given below :—

Month	January	February	March	April	May	June	July	August	September	October	November	December
Birth-rate ..	19·60	20·79	18·01	16·80	14·30	14·17	14·10	14·30	15·10	17·67	18·21	17·82

During the year deaths exceeded births by 932, while during 1943 births exceeded deaths by 26,573 This abnormal feature can only be accounted for by a combination of many factors, *e. g.*, prevailing disturbed conditions of life, better registration of deaths especially those due to epidemic disease and the unprecedented increase of male working class population in the Province contributing a large number of deaths due to various causes but adding nothing to the total births. It must be said that, whatever the causes, this is a most disturbing feature and it is difficult to offer any concrete suggestion until the figures for 1945 are known.

7. *Birth Registration in Urban Areas.*—The total number of births registered in urban areas during the year was 5,116 (17·94 per mile of population) as compared to 4,877 (17·50 per mille) during 1943. This normal trend may be attributed to less disturbance of family life in towns besides better registration of vital events, though expansion of some towns both in area and population may be another cause. The highest rate (46·56) was recorded by Nalbari town, followed by Sunamganj (35·35), Palasbari (31·55), Goalpara (29·69). Doom Dooma town recorded the lowest rate (1·32). Evacuation of females from the war zone areas and their aggregation in comparatively safer towns is the probable reason for this abnormal variation in birth-rates. Birth-rate exceeded death-rate in all the towns excepting Silchar, Hailakandi, Karimganj, Habiganj, Sunamganj, Gauripur, Tezpur, Mangaldai, Nowgong, Golaghat and Doom Dooma.

8. *Birth Registration in Rural Areas.*—The total number of births registered in rural areas during the year was 161,160 (16·74 per mille) as compared to 181,287 (19·11) during 1943. Hailakandi registration circle in the Cachar district recorded the highest rate (31·65), while Barpeta circle in the Kamrup district returned the lowest rate (3·61). Kamrup rural circles generally show much lower rates and defective registration is the probable cause.

9. *Deaths and death-rate.*—167,208 deaths were registered during the year, giving a death-rate of 16·87 as against 159,591 deaths during 1943 with a death-rate of 16·34. This represents an increase of 7,617 or 4·56 per cent.

A comparative statement of the death-rates of the Provinces in India is given below:—

Province	Death-rate 1944	Death-rate 1943	Death-rate 1939-1943
1	2	3	4
Assam	16·87	16·34	16·99
Bengal	29·12	30·96	21·60
Bihar	22·19	16·06	20·81
Orissa	30·36	30·30	26·77
United Provinces	18·74	19·23	20·37
Madras	25·40	25·25	24·75
Bombay	25·47	23·31	24·63
Central Provinces	30·12	27·68	30·88
Punjab	25·26	24·97	24·71
N.-W. F. Province	13·97	15·31	15·89
Sind	11·86	11·59	11·61

Districts of Cachar and Sylhet recorded death-rates above the quinquennial average of 16·99 while the remaining districts below it. Kamrup district returned the lowest death-rate (7·50), again probably due to defective registration. The following table gives the number of deaths reported from each district during 1944 and 1943, shewing increase or decrease as compared to the previous year:—

Districts	Deaths 1944	Deaths 1943	Increase or decrease in 1944
1	2	3	4
Cachar	15,955	12,678	+3,277
Sylhet	76,159	60,255	+15,904
Goalpara	16,872	20,425	—3,553
Kamrup	10,196	13,969	—3,773
Darrang	12,207	14,493	—2,286
Nowgong	7,909	8,916	—1,007
Sibsagar	14,627	14,173	+454
Lakhimpur	13,283	14,682	—1,399
Total	167,208	159,591	—7,617

The appreciable increase in death in the Surma Valley districts is attributable to the general prevalence of Malaria and Small-pox throughout the year. Another probable factor is the high density of population in the Surma Valley (520 per square mile) as compared to other parts of Province, the provincial density of population being 316.

10. *Deaths and death-rate in Urban Areas.*—The total number of deaths registered during the year in urban areas was 5,038, as compared to 4,207 during 1943, giving a death-rate of 17·67 as against 15·09 of 1943, and the quinquennial average of 15·31. Sunamganj town recorded the highest death-rate (75·32). Low death-rates were returned from Doom Dooma (2·64), Tinsukia (4·47) and Sibsagar (4·96), probably due to the evacuation of the more vulnerable sections of population.

The statement below gives the number of deaths registered under each of the seven main heads of mortality during 1944 and 1943. Full particulars are given in appended Statement No. VI.

Cause of mortality	1944	1943	Increase or decrease in 1944
1	2	3	4
Cholera	109	305	—196
Small-pox	409	113	+296
Fevers	1,624	1,168	+456
Dysentery and Diarrhoea	656	659	—3
Respiratory diseases	338	358	—20
Injuries	142	136	+6
All other causes	1,760	1,468	+292
Total	5,038	4,207	+831

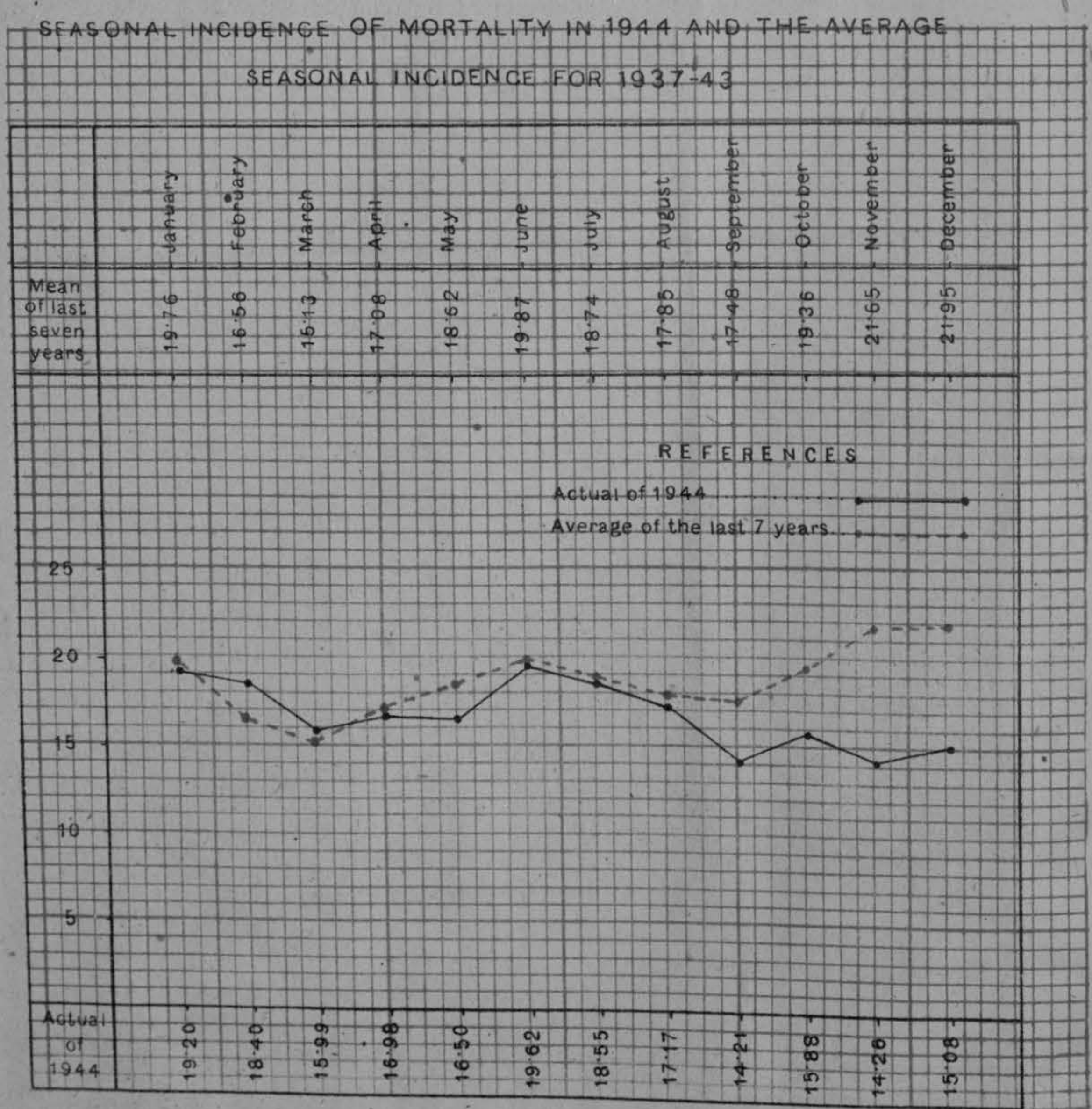
11. *Deaths and Death-rate in rural areas.*—There were 162,170 deaths in rural areas during the year giving a death-rate of 16·84 as compared to 155,384 deaths and a death rate of 16·38 during 1943 and the quinquennial average rate of 17·04.

The number of deaths in rural circles under each of the main causes of mortality during 1944 and 1943 is given in the following table:—

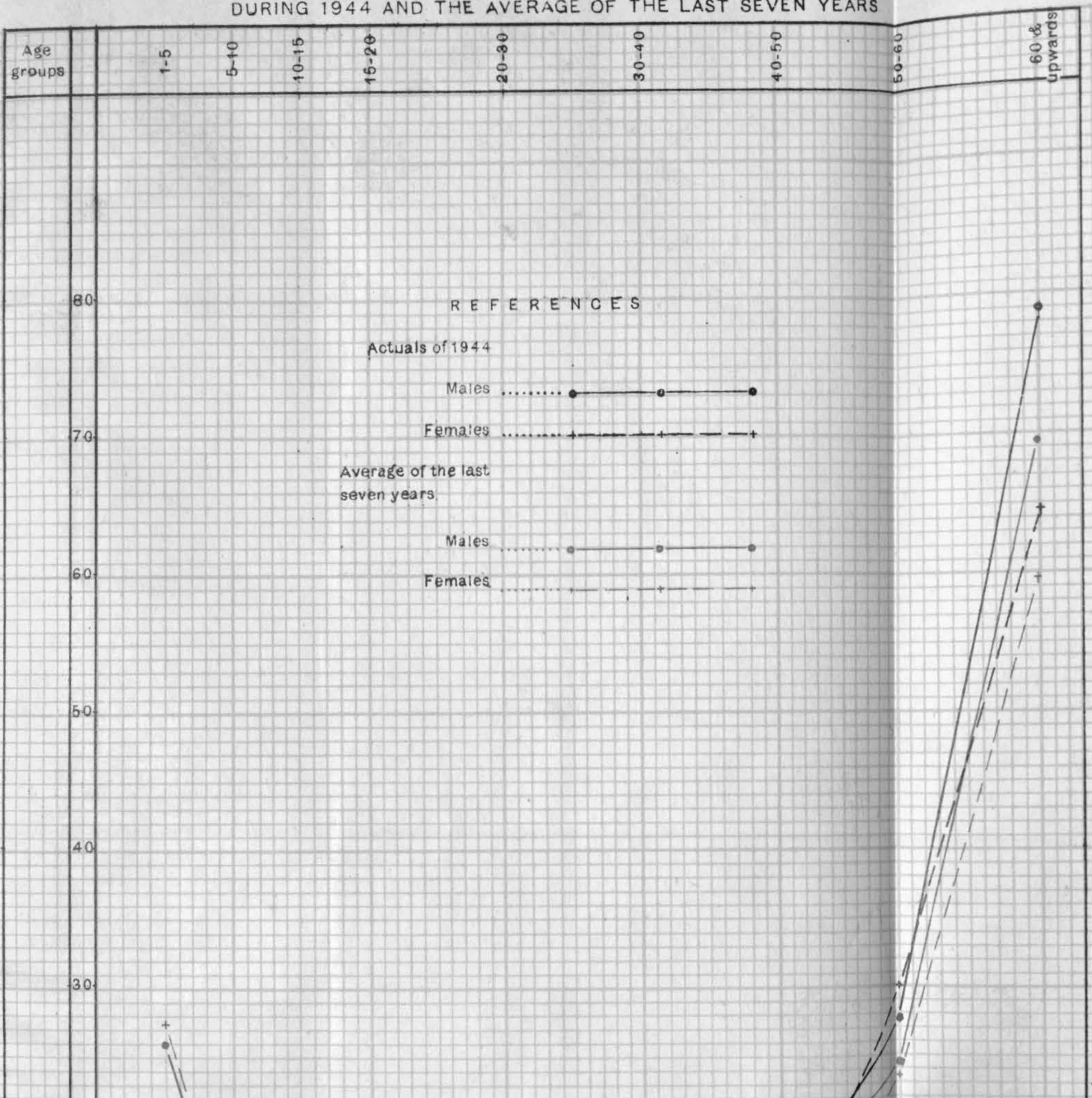
Cause of mortality	1944	1943	Increase or decrease in 1944
1	2	3	4
Cholera	3,998	15,149	—11,151
Small-pox	11,319	1,579	+9,740
Fevers	102,759	92,771	+9,988
Dysentery and Diarrhoea	10,444	9,918	+526
Respiratory diseases	4,182	4,458	—276
Injuries	1,513	1,416	+97
All other causes	27,955	30,093	—2,138
Total	162,170	155,384	+6,786

The highest death-rate was recorded in the Baniyachong circle (46·12) of Sylhet district, mainly due to fevers (malaria . Other circles recording high rates were Madhabpur (39·39), Lakhai (35·01), Chunarighat (31·31) in Sylhet district and Kaltícherra (35·14) and Hailakandi (31·26) in Cachar district.

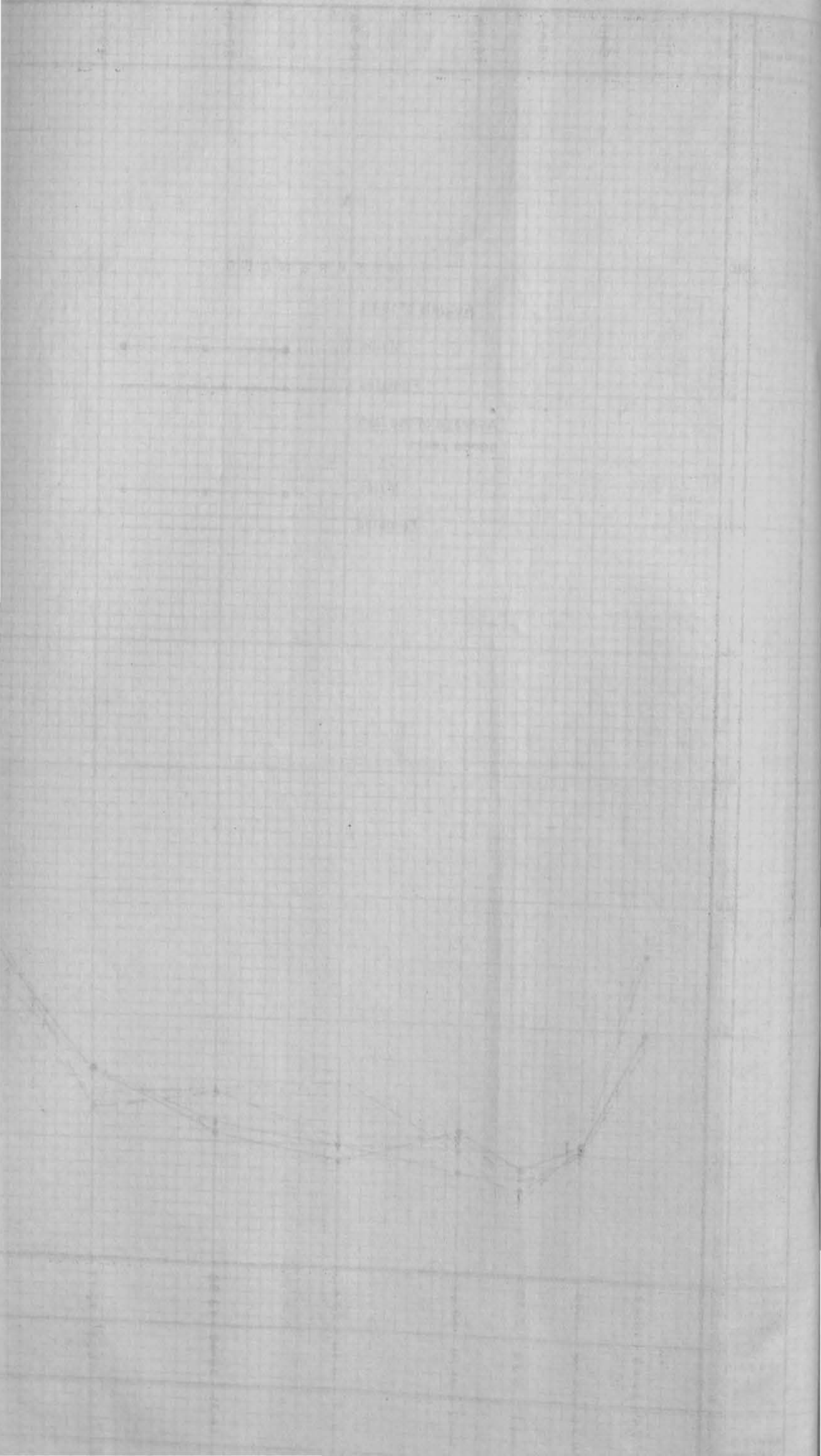
12. *Seasonal variations in mortality.*—Death-rate was highest (19·62) in the month of June and lowest (14·21) in September. The graph below shows the monthly mortality during 1944 as compared to the average monthly mortality of the last 7 years :—



GRAPHS SHOWING MORTALITY BY AGE AND SEX IN THE PROVINCE OF ASSAM DURING 1944 AND THE AVERAGE OF THE LAST SEVEN YEARS



		1-5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	60 & upwards
Actuals of 1944	Females	18·49	10·16	7·70	10·92	10·47	13·98	12·13	29·82	64·48
	Males	19·49	10·49	8·28	11·18	8·46	10·49	15·15	27·40	78·95
Average of the last seven years	Females	27·74	10·76	6·40	10·12	15·17	14·31	13·68	23·46	59·60
	Males	26·07	10·38	7·21	8·33	10·18	11·88	15·54	24·34	69·52



The mortality rate was low during the last four months of the year due to an appreciable decrease in the incidence of Cholera.

13. *Mortality according to sexes.*—During the year, a total of 88,629 males and 78,579 females died as compared to 84,636 males and 74,955 females in the preceding year. The death-rates for both males (16·87) and females (16·86) were higher than those during 1943 but lower than the average of the previous quinquennium. Female death-rate exceeded male death-rate in 5 districts.

Female deaths generally exceed male deaths during the age period 15 to 45 due to stress and strain of child-bearing and the inadequacy of measures for maternity relief. The attached graphs show mortality by age and sex during 1944 and the average mortality during the last 7 years. The number of male deaths to every 100 female deaths was 113.

14. *Mortality according to classes.*—90,914 Hindus, 68,951 Muslims, 1,521 Christians, 70 Buddhists and 5,752 "other classes" died during the year. The death-rates per mille by classes for 1944 and 1943 are shown in the following table,—

Classes	Death-rate 1943	Death-rate 1944	Increase or Decrease
1	2	3	4
Hindus	22·13	20·83	—1·31
Muslims	16·79	19·15	+2·36
Christians	47·75	36·57	—11·18
Buddhists	9·71	8·29	—1·42
Other classes	4·46	3·03	—1·43

It will be seen that the Christian death-rate, though considerably less than the previous year, is still abnormally high while rates for Buddhists and "other classes" are unusually low. This cannot be taken to represent a correct state of vital events and the obvious error is due to the inability on the part of primary agents to record communal classification in accordance with the principle adopted for the 1941 census which placed considerable populations of Christians, Buddhists and Hindus under "other classes" as being tribals.

The highest death-rate for both Hindus (39·59) and Muslims (26·55) was registered in Cachar district, while the lowest rate for both communities was recorded in Kamrup district.

15. *Mortality according to age.*—The following table shows the rate of mortality by sexes in different age groups and the excess or defect of female death-rates :—

Age periods	1944		Excess or defect of female death-rate
	Male	Female	
1	2	3	4
Under one year	165·77	157·78	—7·99
1 to 5 years	19·49	18·49	—1·00
5 ,, 10 ,, ...	10·49	10·16	—·33
10 ,, 15 ,, ...	8·28	7·70	—·58
15 ,, 20 ,, ...	11·18	10·92	—·26
20 ,, 30 ,, ...	8·46	10·47	+2·01
30 ,, 40 ,, ...	10·49	13·98	+3·49
40 ,, 50 ,, ...	15·15	12·13	—3·02
50 ,, 60 ,, ...	27·40	29·82	+2·42
60 years and upwards	78·95	64·48	—14·47
	16·87	16·86	—·01

It will be observed that the highest mortality was recorded amongst infants (under one year of age), and the lowest in the age group 10—15 both amongst males and females.

16. *Infantile Mortality.*—The following table shows the deaths and death-rates amongst infants calculated on the births in each year for 1944 and the previous decennium.

Year	Births			Deaths of infants			Death-rate of infants		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10
1934	125,740	117,016	242,756	21,893	18,250	40,143	174·11	155·96	165·36
1935	123,668	116,230	239,898	21,015	18,140	39,155	169·93	156·07	163·22
1936	123,839	115,865	239,704	19,630	16,522	36,152	158·51	142·59	150·82
1937	128,233	119,991	248,224	21,350	18,377	39,727	166·49	153·15	160·04
1938	122,346	114,834	237,180	21,074	17,983	39,057	172·25	156·60	164·67
1939	125,573	116,855	242,428	19,666	16,633	36,299	156·61	142·34	149·73
1940	126,846	117,308	244,154	18,806	15,804	34,610	148·26	134·72	141·75
1941	131,021	122,060	253,081	19,018	15,362	34,380	147·50	128·55	138·28
1942	106,832	100,241	207,073	15,279	12,992	28,271	143·02	129·61	136·53
1943	96,136	90,028	186,164	13,144	11,248	24,392	136·72	124·94	131·02
1944	87,049	79,227	166,276	14,430	12,499	26,929	165·77	157·78	161·95

It will be seen that the infant mortality rate has been on the decline upto 1943, but during 1944 it has risen considerably. The number of infant deaths (under one year of age) registered during the year was 26,929 out of 166,276 total births. Of these the largest number (11,057 or 41 per cent.), died within one month of birth. Infant deaths during the age periods "one to six months" and "six to twelve months" were 9,069 or 34 per cent. and 6,803 or 25 per cent. respectively. For every 100 female births, 110 males were born and for every 100 female infant deaths 115 male infants died. The rise in infantile mortality during 1944 may be due to the cumulative effect of disturbed conditions and scarcity of protective foods as a result of the impact of war but the general high rates prevailing during the past years indicate the need for a properly organised system of antenatal care and maternity and child-welfare work.

The infant mortality rate of Assam for 1944 is compared in the following table with that of other Provinces :—

Province	Infantile Mortality Rate
Assam	161·95
Bengal	207·90
Bihar	111·29
Orissa	208·26
Central Provinces	221·38
Madras	192·44
Bombay	166·09
United Provinces	124·53
Punjub	173·15
N.-W. F. Province	128·56
Sind	136·00

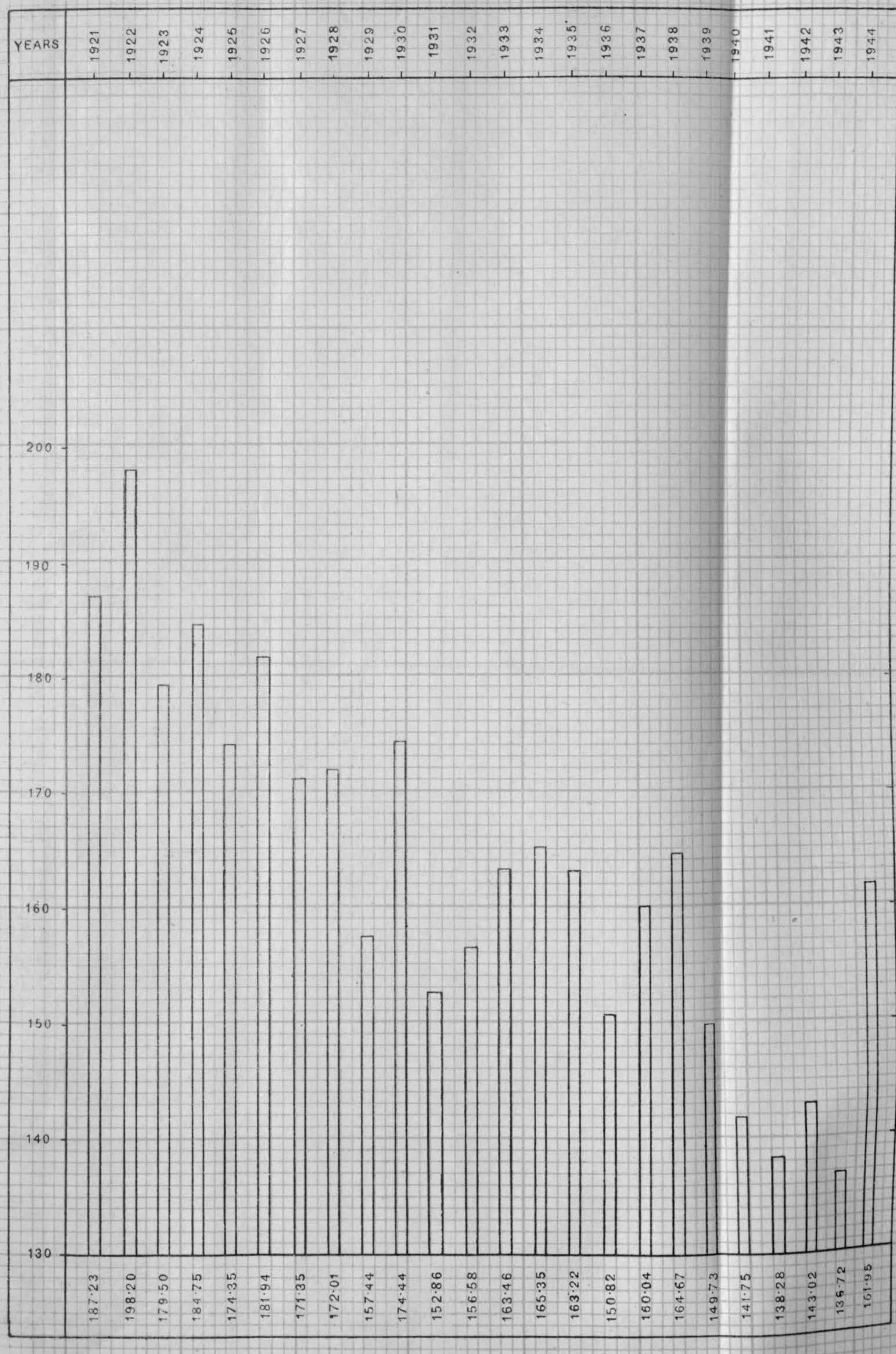
Chart No. I shows the infant mortality rates of Assam from the year 1921 to 1944.

During the year 5,900 still births were reported, comprising 3,035 Hindus, 2,376 Muslims, 159 Christians, 14 Buddhists and 316 other classes. Of the total number of still births, 3,353 were males and 2,547 females. The percentage of still births to live births was 3·55 during the year as compared to 2·92 during 1943.

17. *Births and deaths in Hill Districts.*—The midyear estimated population of the hill districts (excluding Naga Hills) for 1944 was 498,047. The table below shows birth and death rates for 1944 in parts of the hill districts in which births and deaths are registered as compared with those of the previous year.

District	Estimated population under registration	1944		1943	
		Birth-rate	Death-rate	Birth-rate	Death-rate
	2	3	4	5	6
Khasi and Jaintia Hills	76,609	14·76	10·09	14·16	11·57
Garo Hills	234,501	14·24	14·57	19·57	17·87
Lushai Hills	162,246	30·09	19·61	31·36	24·51
Naga Hills	Statistics	incomplete	...	11·46	25·47
Sadiya Frontier Tract	24,691	21·91	16·44	21·09	19·24

CHART I INFANT MORTALITY IN ASSAM 1921-1944



[illegible]

Khasi and Jaintia Hills.—The number of births and deaths recorded in the Khasi and Jaintia Hills during the year was 1,131 and 773 respectively as compared to 1,071 births and 876 deaths during 1943. Five deaths from Cholera and 17 deaths from Small-pox were reported during the year. There were 355 deaths from fevers and a total of 29,466 cases of Malaria was treated at the dispensaries of the District. The total number of births and deaths registered in Shillong during 1944 was 636 and 329 as compared with 572 and 376 respectively during 1943. The table below shows the number of attacks and deaths from infectious diseases recorded by the Shillong Municipality during 1944.

Diseases	Attacks	Deaths
Cholera ...	...	2
Small-pox	...	21
Enteric Fevers	...	8
Influenza ...	...	19
Pneumonia	...	28
Tuberculosis (Pulmonary)	...	11
Diphtheria	...	Nil
C. S. Fever	...	5

Garo Hills.—There were 3,350 births and 3,429 deaths during the year as compared to 4,513 births and 4,132 deaths during 1943. The fall in the birth-rate was probably due to a large number of men being away from their families on joining the Porter and Pioneer Corps. Malaria was prevalent throughout the district and an out-break of Small-pox occurred during the year.

Lushai Hills.—There were 4,882 births and 3,181 deaths during 1944 as compared to 4,998 births and 3,907 deaths in the preceding year. Of the total number of deaths, "fevers" accounted for 1,961, respiratory diseases for 799 and dysentery and diarrhoea for 302. The health conditions in the district remained, on the whole, satisfactory.

Naga Hills.—During the first half of the year, Kohima subdivision became the scene of actual warfare and civil administration together with its medical organisation was disrupted. As a result statistical data for the year are incomplete. Incidence of malaria was high and there was an out-break of Cholera in Jakhoma village soon after the the cessation of hostilities.

Sadiya Frontier Tract.—The total number of births and deaths registered in 1944 was 541 and 406 respectively as compared with 513 births and 470 deaths during 1943. The largest number of deaths (275) was reported under "fevers". An out-break of Small-pox oeccurred in Pasighat Subdivision and was quickly brought under control.

Manipur State.—Births and deaths are not recorded in the State. A total of 39 attacks and 19 deaths from Cholera and 354 attacks and 114 deaths from Small-pox was reported during the year.

18. *Registration in Tea Gardens.*—The table below shows the birth and death-rates reported from tea estates during the year 1944 as compared to those of the preceding year:—

Districts	Birth-rate 1914	Birth-rate 1943	Death-rate 1944	Death-rate 1943
1	2	3	4	5
Cachar	21·65	24·81	24·64	20·66
Sylhet	20·61	21·71	15·38	15·01
Goalpara	14·95	33·00	11·53	23·85
Kamrup	15·37	31·19	15·49	30·59
Darrang	13·84	27·91	18·58	25·37
Nowgong	16·54	21·14	13·19	17·37
Sibsagar	27·88	35·24	17·19	19·19
Lakhimpur	21·87	26·25	20·76	24·06
Total	21·83	27·62	18·90	21·11

The total number of births and deaths in 1944 was 24,699 and 21,415 as compared to 31,004 and 23,685 respectively during the preceding year. The largest number of deaths was recorded under "other causes" (9,258), followed by Fevers (5,632), Dysentery and Diarrhoea (3,420), Respiratory Diseases (2,388). There were 89 deaths from Cholera and 249 deaths from Small-pox as compared with 408 deaths from Cholera and 79 deaths from Small-pox in the preceding year.

19. *Registration in Railway Areas.*—During the year 208 births and 196 deaths were registered within Railway limits, as compared to 71 births and 184 deaths in the preceding year.

20. *General Accurary of Vital Statistics.*—During the year there was no change in the primary agencies engaged in the collection of vital statistics either in urban or rural areas. The re-organisation of the Department has shifted the responsibility of compiling district returns from Civil Surgeons to District Medical Officers of Health in the plains districts. This change has affected no improvement in the completeness or accuracy of the vital statistical returns and as mentioned before, the whole machinery for the collection of vital events in the Province needs a radical change. During the year no survey work was done to check the degree of inaccuracy due to paucity of staff. A scheme has been put forward in connection with Post-War Reconstruction Schemes and if it materialises, much improvement will be affected.

As usual, verification of vital occurrences in the compulsory areas and inspection of village registers in some rural areas was carried out by Public Health Staff and necessary action taken. The percentage of omission based on four districts reporting omissions, was 1·76 in respect of births and 1·74 in respect of deaths.

21. *Emigration and Immigration.*—The only figures available are those of immigrant labour employed by the Tea Industry of Assam. No record is available of the numbers of agricultural or other casual immigrants. The Statement below shows the number of tea garden labourers who entered Assam during 1944 :—

Month		Total Number of Tea Garden Labour Immigrants entering Assam during 1944
January	1944	4,439
February	1944	7,758
March	1944	10,713
April	1944	10,499
May	1944	7,600
June	1944	4,589
July	1944	1,641
August	1944	486
September	1944	304
October	1944	318
November	1944	615
December	1944	2,507
	Total	51,469

During 1943, 64,485 labourers entered Assam, while during 1942 the total number was 19,088.

During the year 1944, 613 cases of sickness among the immigrant labour were reported of whom 50 died.

A total of 45 labourers was treated at the Gauhati Emigration Hospstal, of whom there were 7 cases of Cholera, 13 cases of Small-pox, 4 cases of Cerebro-Spinal Fever and 12 cases of Measles.

CHAPTER III

The state of Public Health and History of Chief Diseases

A.—PUBLIC HEALTH

22. The general state of public health in the Province remained fairly satisfactory in spite of many adverse factors directly or indirectly affecting the health of the population. Death-rate for 1944 (16·87) is slightly higher than that for 1943(16·34), but is lower than the quinquennial average of 16·99. There was an increase in the total number of deaths from the previous year by 7,617. But the most disturbing feature of the year is the considerable fall in the birth-rate and the increase in the infantile mortality rate from 131·02 in 1943 to 161·95 in 1944. The following table shows the death-rates per mille from the chief causes of mortality during the year 1944 as compared with the previous quinquennium.

Disease	1944			1939-43			Difference (—) or (+)
	Urban	Rural	Combined	Urban	Rural	Combined	
1	2	3	4	5	6	7	8
Cholera ..	0·38	0·42	0·41	0·48	0·89	0·88	— 0·47
Small-pox	1·43	1·18	1·18	0·21	0·13	0·13	+ 1·05
Plague ..				Nil			
Fevers ..	5·69	10·67	10·53	4·22	10·61	10·42	+ 0·11
Dysentery and Diarrhoea ..	2·30	1·08	1·12	2·17	1·06	1·09	+ 0·03
Respiratory Diseases	1·19	0·43	0·46	1·63	0·52	·55	— 0·09
Injuries ..	0·50	0·16	0·17	0·48	0·18	0·19	+ 1·48
Other causes	6·18	2·90	3·00	6·11	3·49	3·73	— 2·23
Total ..	17·67	16·84	16·87	15·31	17·04	16·99	— 0·12

Compared with the previous year the death-rate from Cholera was lower and from Small-pox appreciably higher than that for 1943.

The following table shows the birth-rate, death-rate and infantile mortality rate of each Province in India during 1944 :—

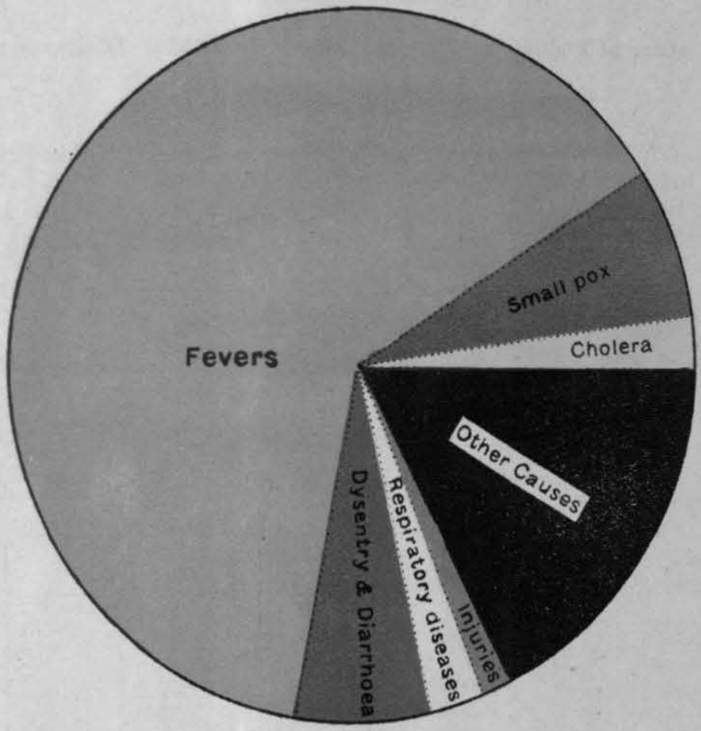
Province	Birth-rate	Death-rate	Infantile Mortality rate
Assam	16·77	16·87	161·95
Bengal	16·14	29·12	207·90
Bihar	20·63	22·19	111·29
Orissa	25·24	30·36	208·26
Central Provinces	37·98	30·12	221·38
Madras	29·39	25·40	192·44
Bombay	33·93	25·47	166·09
United Provinces	25·09	18·74	124·53
Punjub	36·78	25·26	173·15
N.-W. F. Province	17·17	13·97	128·56
Sind	14·94	11·86	136·00

In making a comparative study of these figures, it has to be noted that the accuracy and completeness of registration varies from Province to Province.

CHART II MORTALITY FROM

YEARS	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Deaths	12829	16219	3729	19182	6233	10275	15392	6915	7765	6382	5523
Death Rates	1·87	2·36	0·54	2·72	0·90	1·49	2·24	1·01	1·13	0·92	0·70

COMPARATIVE DIAGRAM OF DEATHS BY CAUSES FOR 1944



21. *Emigration and Immigration.*—The only figures available are those of immigrant labour employed by the Tea Industry of Assam. No record is available of the numbers of agricultural or other casual immigrants.

The Statement below shows the number of tea garden labourers who entered Assam during 1944 :—

Month		Total Number of Tea Garden Labour Immigrants entering Assam during 1944
January	1944	4,439
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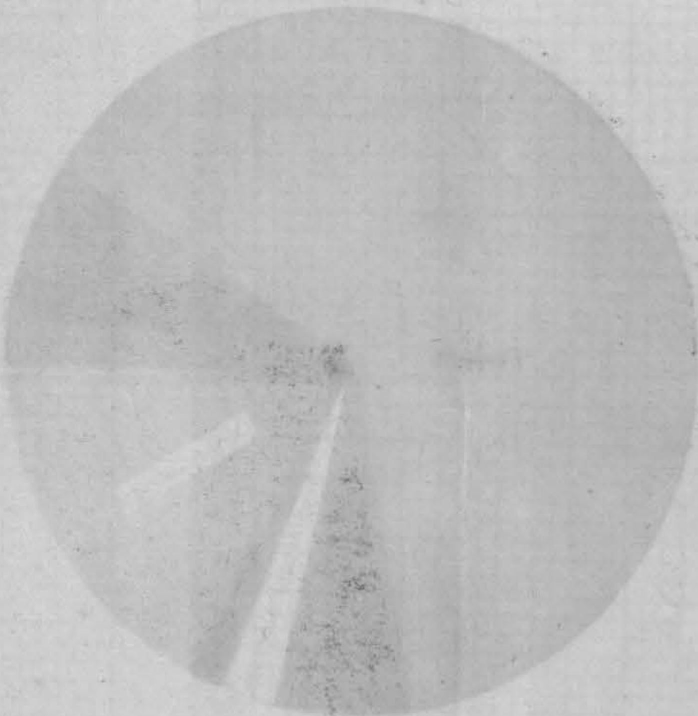


CHART II MORTALITY FROM CHOLERA IN ASSAM 1921-1944

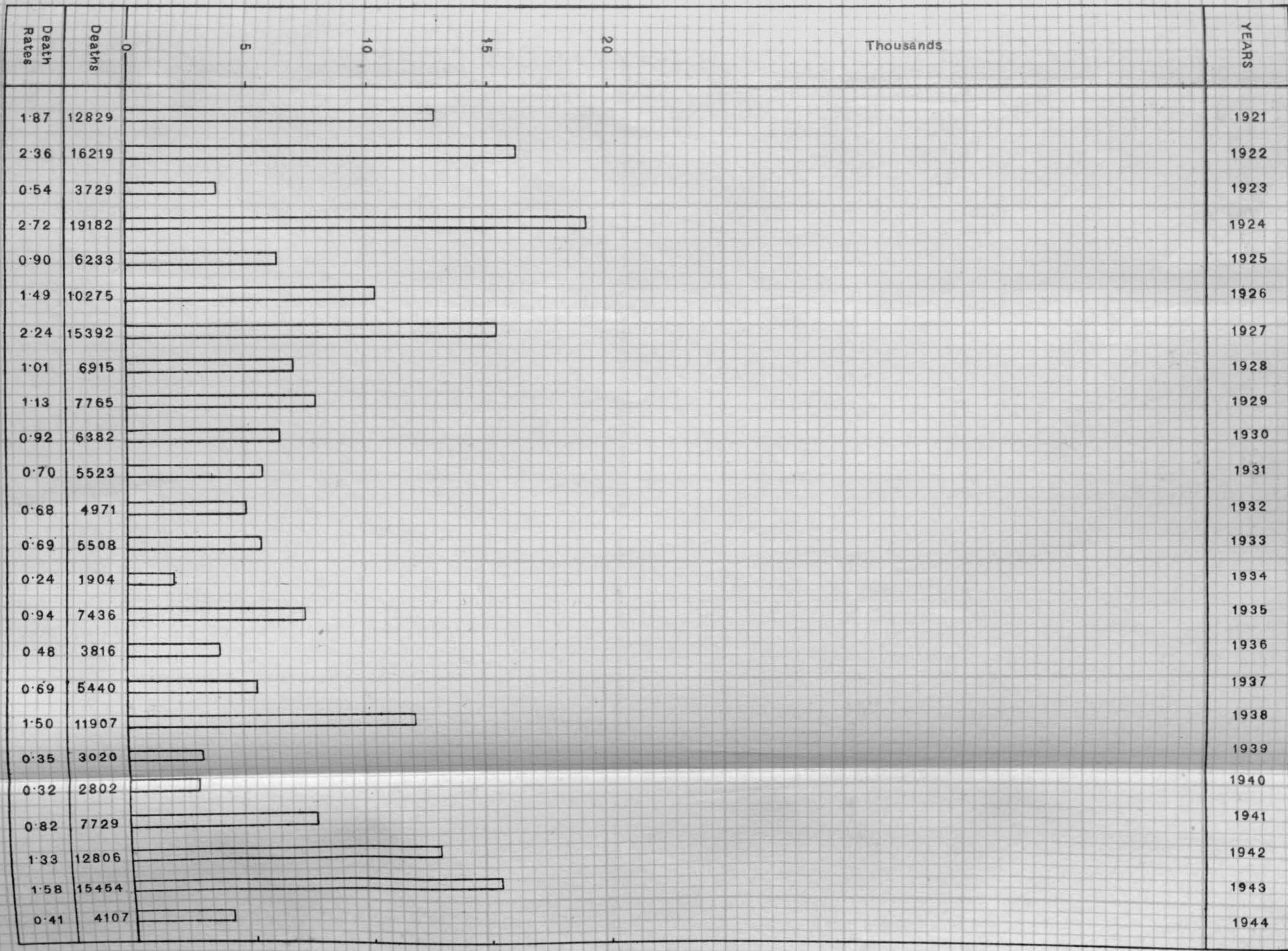
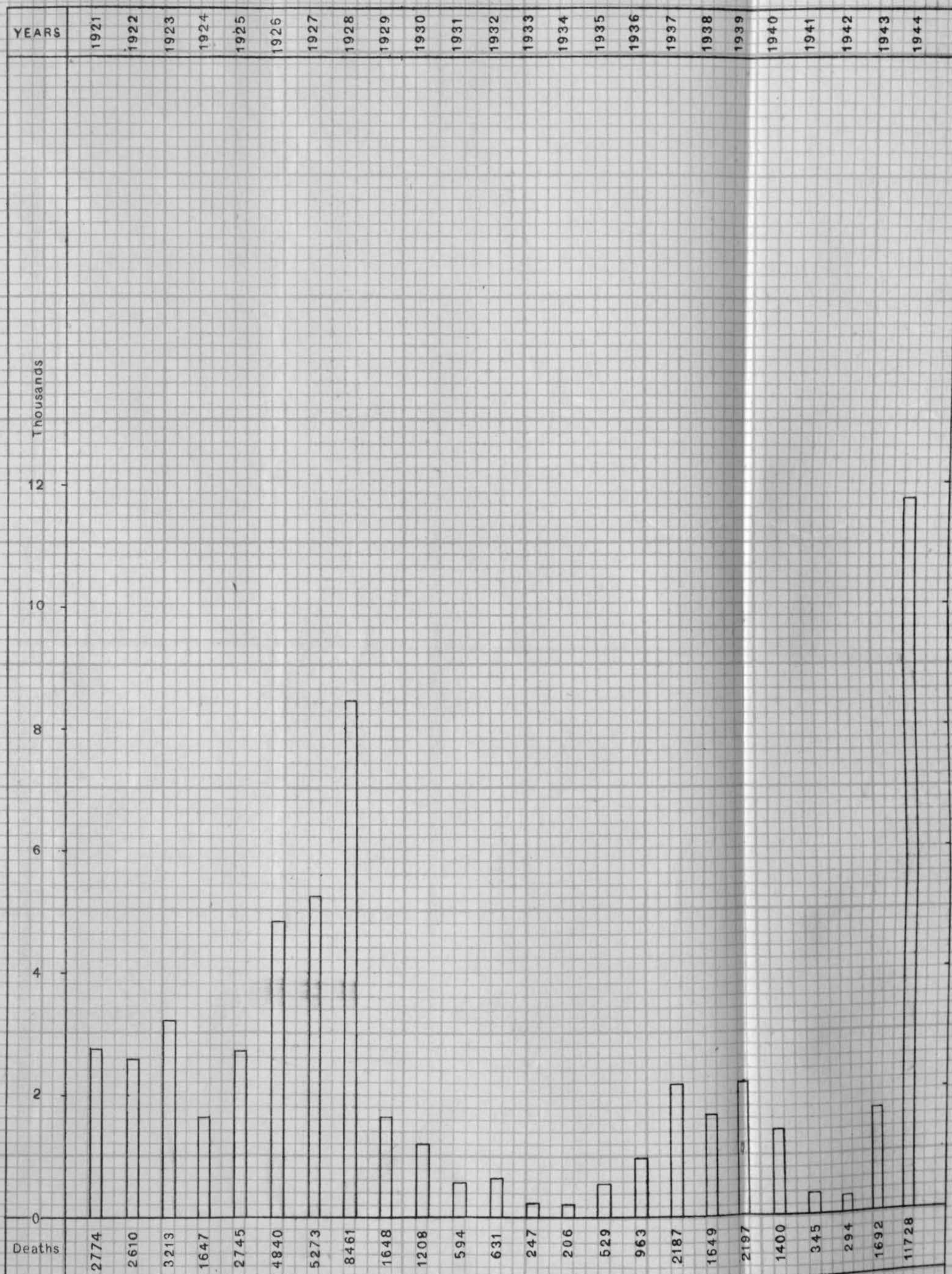
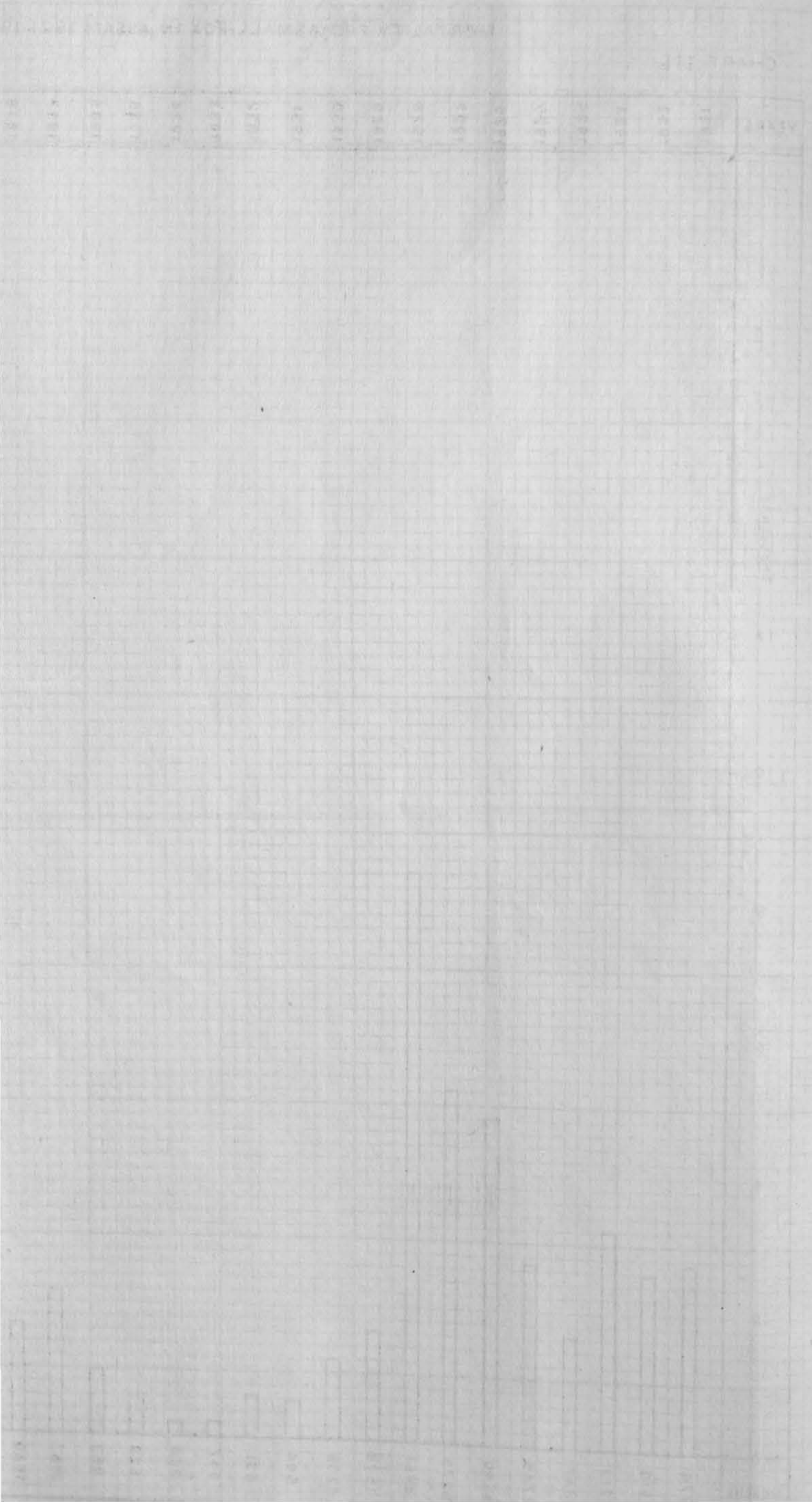


CHART III

MORTALITY FROM SMALL-POX IN ASSAM 1921-1944





B. CHIEF DISEASES

23. *Cholera.*—The incidence of Cholera was low in most parts of the Province during 1944. The epidemic of 1943 was carried into the early part of 1944 during which period the incidence was comparatively higher. The total number of deaths from Cholera during the year was 4,107 as compared to 15,454 during 1943 and the quinquennial average of 8,363. The table below shows the death-rate per mille due to Cholera by districts during 1944, as compared to the quinquennial average rate :—

District	Death-rate 1944	Per mile 1939-43	Difference (—) or (+)
Cachar	0·29	0·63	— 0·34
Sylhet	0·94	1·25	— 0·31
Goalpara	0·11	0·69	— 0·78
Kamrup	0·14	1·00	— 0·86
Darrang	0·20	0·69	— 0·49
Nowgong	0·38	1·50	— 1·12
Sibsagar	0·08	0·23	— 0·15
Lakhimpur	0·02	0·19	— 0·17
Total ...	0·41	0·88	— 0·47

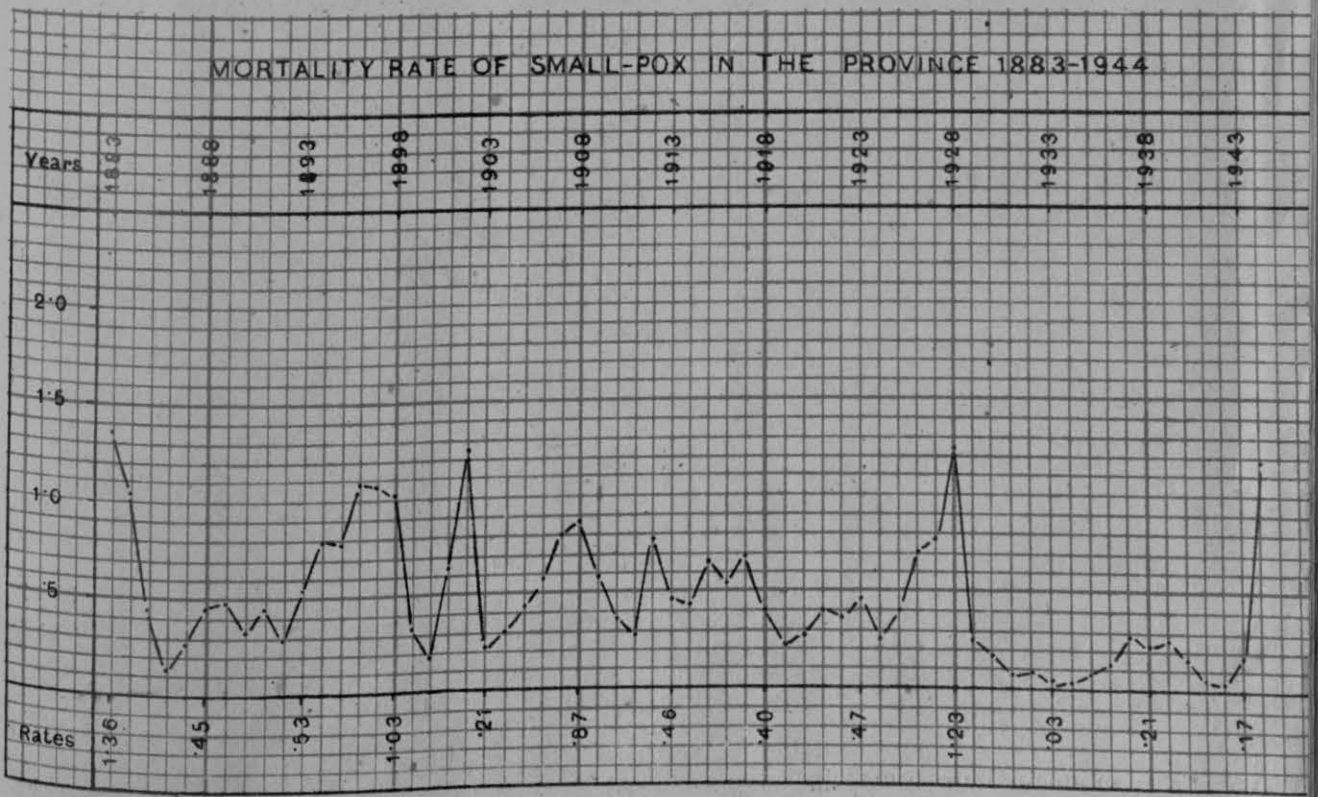
It will be observed that there is a wide range of variation in the incidence of Cholera between districts The low-lying districts of Sylhet, Goalpara and Kamrup and part of Nowgong are the worst sufferers. Sylhet district shows the highest incidence probably due to facility of spread on account of its density of population and its contiguity to an endemic area of Bengal. Fourteen towns were reported to be infected during the year as compared to 21 towns during 1943. Sunamganj town of the Sylhet district recorded the highest number of deaths (49). Lahorighat rural circle of Nowgong district recorded the highest. death-rate (4·63) followed by Madhabpur (2·54) and Chattak (1·99) in Sylhet district.

Besides the usual preventive measures such as disinfection, chlorination and isolation where possible, approximately 971,508 c.cs of Cholera Vaccine were used for inoculation and 23,230 boxes of Bacteriophage for prevention and treatment.

From the tea estates a total of 89 deaths from Cholera was reported during the year as compared to 408 deaths during 1943.

24. *Small-pox.*—Small-pox was prevalent in epidemic form in some areas, throughout the Province during the year. Sylhet district appears to be an endemic focus, probably due to the existence of large numbers of unprotected persons in the district and the lack of facilities for treatment and isolation. This district recorded the highest number of deaths ; at no time of the year was the district free ; and although out-breaks in other districts died down quickly, in Sythet the decline was very slow It would appear that epidemics or exacerbations in the incidence of Small-pox occur in the Province at intervals of 5—7 years. This periodicity is probably due to the accumulation of non-immune population during quiet periods when the rural masses are unwilling to be vaccinated. Vaccination or re-vaccination is not compulsory in rural areas and vaccination work becomes very limited during non-epidemic periods.

During 1944 total number of deaths from Small-pox was 11,728 as compared to 1,692 during 1943 and the quinquennial average of 1,052. Karimganj recorded the highest rate of mortality (8·92) followed by Sunamganj (8·04), both in the district of Sylhet. Among rural circles Madhabpur in the same district, recorded the highest mortality rate (10·48). The graph below shows the mortality rate of Small-pox in Assam from 1,883 to 1,944.



25. *Plague.*—The Porvince remained free from Plague during the year.

26. *Fevers.*—Fevers accounted for 63·2 per cent. of the total mortality as against 58·86 per cent. during 1943. Deaths from "fevers" are mainly due to Malaria and a small percentage from Kala-azar and other diseases with Fever as the predominant symptom. The total number of deaths recorded from Fevers during the year was 104,383 as compared to 93,939 of the previous year and the quinquennial average of 95,446. The mortality rate was 10·53 per mille as compared to 9·62 of the previous year and the last 5-yearly avearge of 10·42. The highest mortality was recorded in July (10,704) and the lowest in May (7,409).

The table below shows the death-rate per mille, district by district, for the year 1944 and the previous quinquennium :—

District	Death-rate 1944	per mille 1939-43
Cachar	13·77	10·21
Sylhet	14·11	10·85
Goalpara	14·77	18·35
Kamrup	5·12	6·85
Darrang	10·21	11·17
Nowgong	6·26	9·32
Sibsagar	7·75	8·16
Lakhimpur	6·16	7·84
Total ...	10·53	10·42

As in previous years, Quinine and other Anti-Malaria Drugs were distributed free to indigent Malaria patients in the badly affected areas throughout the Province.

A chart showing the provincial mortality from "fevers" from 1921 to 1944 is attached.

27. *Dysentery and Diarrhoea.*—A total of 11,100 deaths from dysentery and diarrhoea was reportesd during the year as compared to 10,577 in the preceding year and the quinquennial average of 10,042. The death-rate per mille of population was 1·12 as compared to 1·08 in 1943. The table below shows the death-rate by districts during 1944 and the previous quinquennium :—

Districts	Death-rate 1944	per mille 1939-43
Cachar	2·41	1·87
Sylhet	1·33	1·12
Goalpara	·10	·25
Kamrup	·41	·39
Darrang	1·73	1·69
Nowgong	·47	·76
Sibsagar	1·20	1·56
Lakhimpur	1·61	1·59
Total ...	1·12	1·09

The districts of Sylhet, Cachar, Kamrup, Darrang and Lakhimpur recorded higher incidence than that during the previous year. As regards seasonal prevalence, the highest number of deaths (1,033) was reported during June and the lowest (766) in March.

28. *Respiratory Diseases.*—There were 4,520 deaths due to this group of diseases during 1944 as compared to 4,816 deaths during 1943. The mortality rate was 0·46 as compared to 0·49 in 1943 and the quinquennial average of 0·55. Lakhimpur district recorded the highest death-rate (1·36) followed by Cachar (0·99) and Sibsagar (0·71).

29. *Influenza.*—352 deaths due to Influenza were reported during 1944 as compared to 705 during 1943. Sylhet district recorded the highest number of deaths (115) followed by Nowgong (103). The mortality from Influenza is included under "fevers" and it is doubtful whether all cases reported under this head are those of epidemic Influenza.

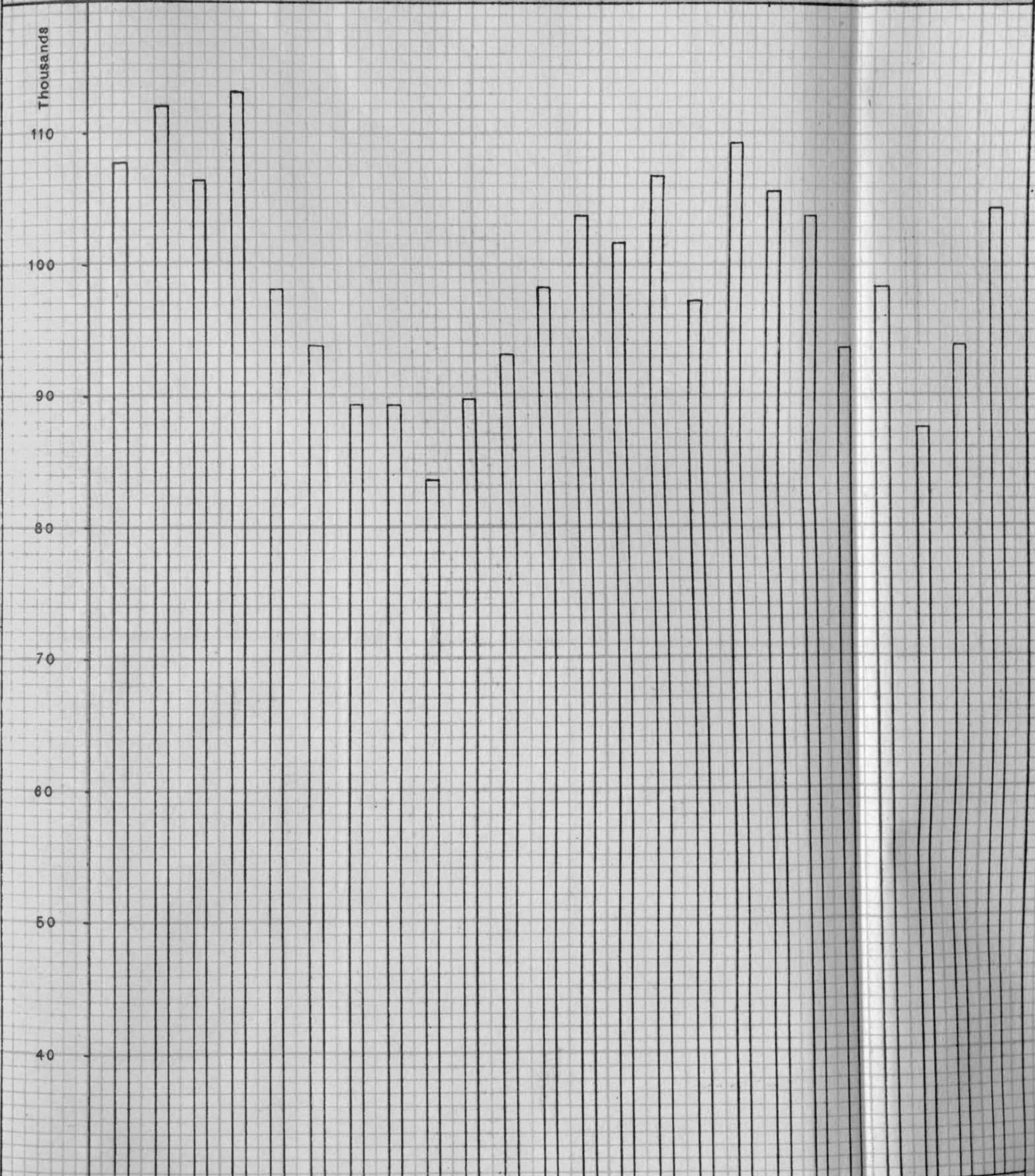
30. *Injuries and other causes.*—During the year 1,655 deaths were reported from Injuries as compared to 1,552 during 1943. This includes 120 deaths due to Injuries received from wild animals and 49 deaths due to rabies.

Deaths reported under "other causes" numbered 29,775 as against 31,561 in 1943. This head of mortality includes such diverse causes as senility, diabetes, anaemia, cancer, etc., and even deaths due to childbirth are included.

31. *Enteric fever.*—Enteric group of fevers accounted for 67 deaths during the year as compared to 69 during 1943. Typhoid fever is only notifiable in Municipal areas and there is no doubt that a large number of cases remain undiagnosed. During the year deaths from Typhoid were reported from the following towns:—Silchar (8), Sylhet (12), Karimganj (1), Habiganj (1), Dhubri (4), Goalpara (1), Gauhati (3), Tezpur (15), Nowgong (10), Jorhat (1) and Dibrugarh (11). Although Tezpur town recorded the highest mortality due to Typhoid, it is certainly no worse in its sanitary standard than most towns in the Province. The variation in mortality is probably attributable to defective diagnosis and registration. There was an outbreak of Typhoid fever at Gauhati during November with 29 cases and the probable source of infection was a leaky sub-main, water being supplied intermittently.

CHART IV

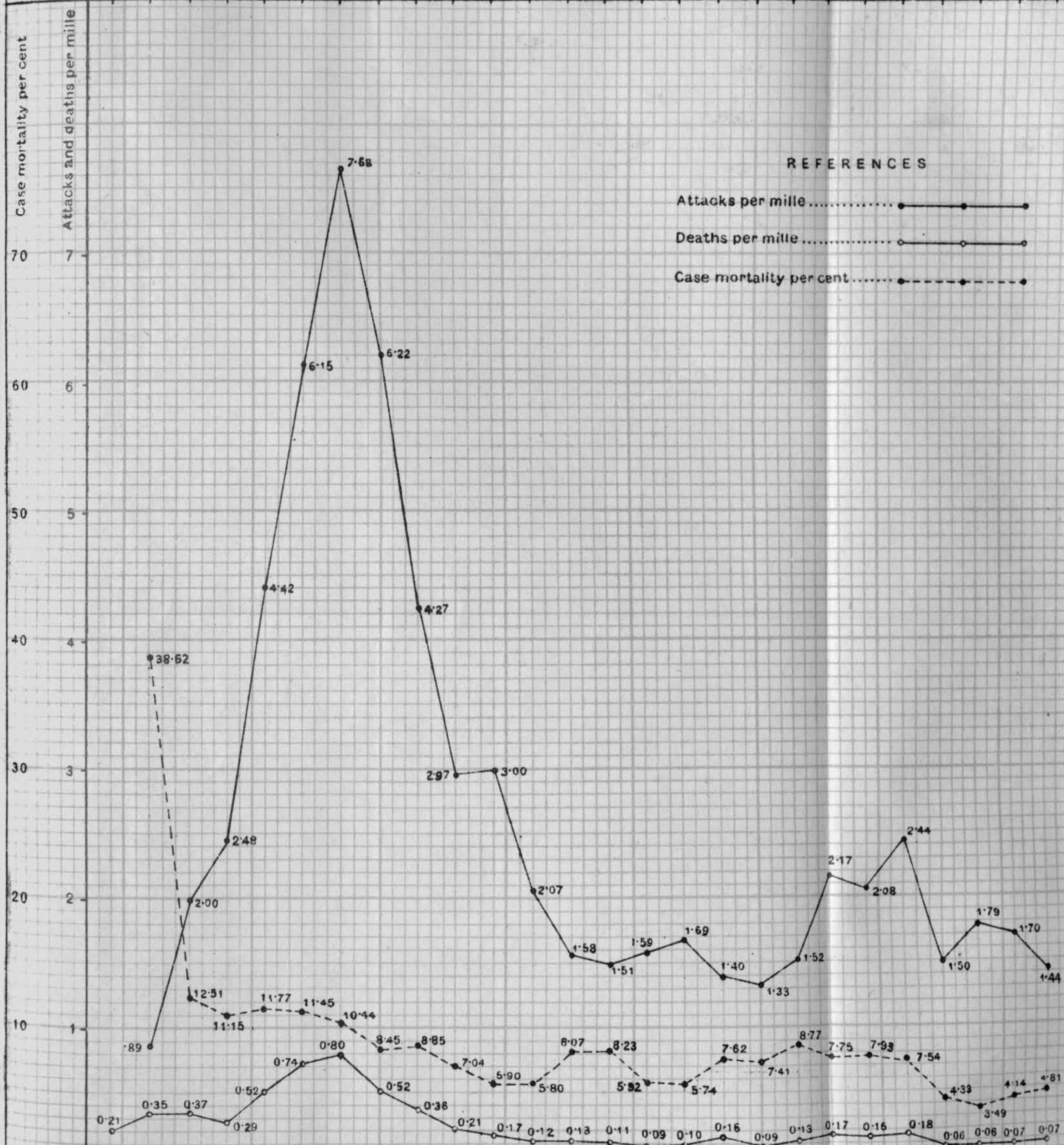
MORTALITY FROM FEVERS IN ASSAM 1921-1944



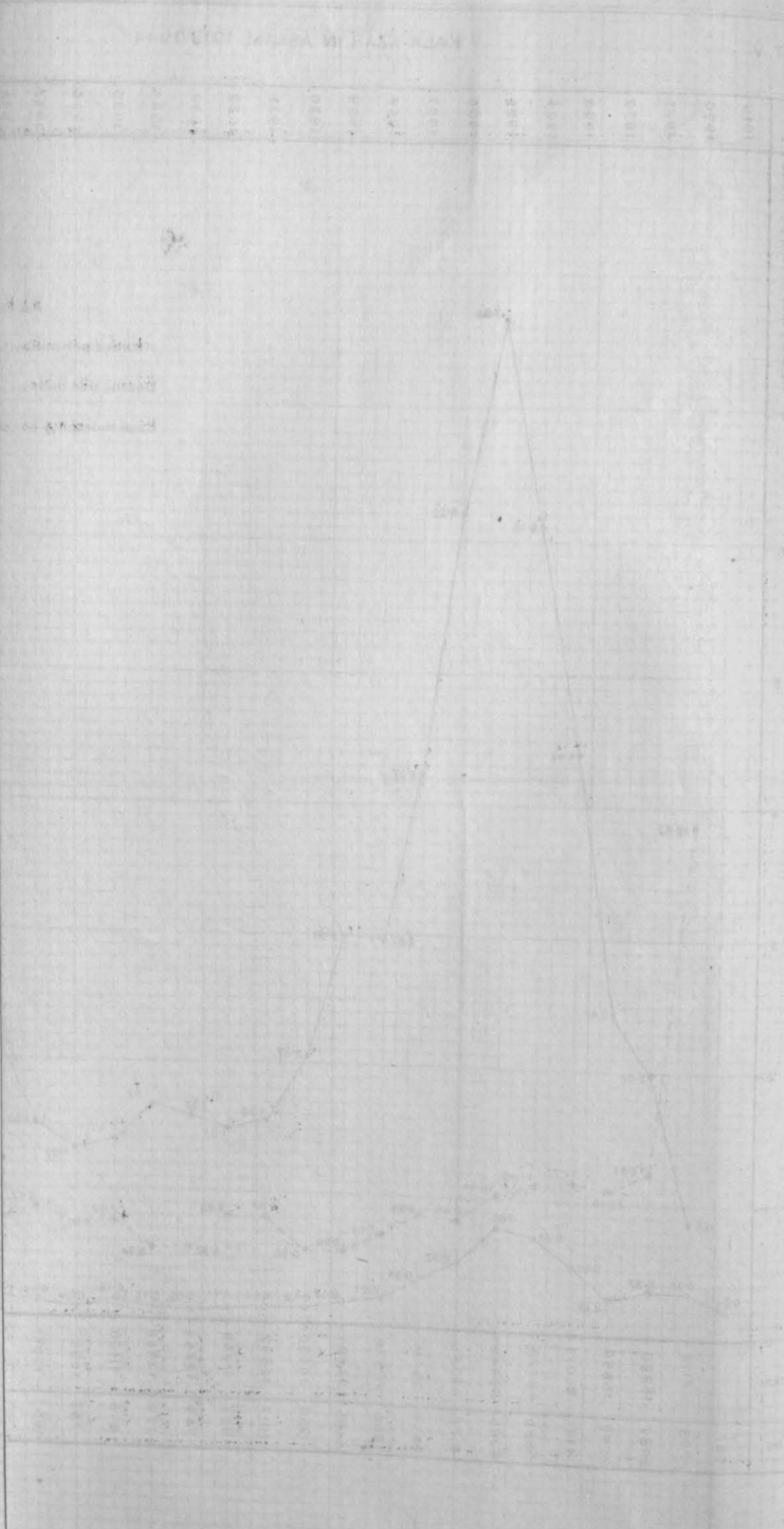
Years	Deaths	Death Rates
1921	107,626	
1922	112,094	
1923	106,397	15·52
1924	113,089	16·52
1925	98,015	14·30
1926	93,685	13·67
1927	89,324	13·03
1928	89,255	13·03
1929	83,520	12·19
1930	89,772	13·10
1931	93,189	11·76
1932	98,211	12·39
1933	103,890	13·10
1934	101,779	12·84
1935	106,712	13·46
1936	97,240	12·27
1937	109,375	13·80
1938	105,687	13·33
1939	103,892	12·19
1940	93,677	10·82
1941	98,204	10·37
1942	87,520	9·10
1943	93,939	9·62
1944	104,383	10·53

CHART V'

KALA-AZAR IN ASSAM 1919-1944



YEARS	Attacks	Deaths
1919		1667
1920	7118	2793
1921	15880	2987
1922	15659	2292
1923	85071	4131
1924	48770,	5585
1925	60940	6365
1926	49385	4176
1927	33415	2859
1928	23576	1660
1929	23804	1405
1930	16430	953
1931	12592	1017
1932	11958	987
1933	12650	749
1934	13398	770
1935	11100	845
1936	10587	753
1937	12051	1057
1938	17268	1338
1939	17756	1396
1940	21149	1594
1941	16470	714
1942	20033	701
1943	19208	796
1944	16590	798



32. *Yaws.*—During the year 597 cases of Yaws were treated at the Public Health Department and Local Board Dispensaries as compared to 1,368 cases treated during 1943 and 2,008 during 1942. This disease is mostly prevalent amongst aboriginal and hill tribals and so is limited to some districts only. There appears to be a downward trend in its incidence, its spread is limited and with more thorough survey and early treatment it is hoped to eradicate the disease from all accessible areas of the Province.

33. *Minor Eye Complaints.*—The number of cases of minor eye complaints treated at the Public Health Department Dispensaries from 1939 to 1944 are given below:—

Year	Number of cases treated
1939	18,201
1940	6,562
1941	7,676
1942	2,975
1943	2,868
1944	3,148

No work in connection with survey and welfare of the blind has so far been undertaken in the Province. The desirability of establishing travelling eye dispensaries is now under con sideration,

34. *Kala-azar.*—The recrudescence of *Kala-azar* in the Province began in 1937 and reached its peak of mortality in 1940. It now appears to be on the decline but thorough and extensive surveys are necessary before this can be confirmed. Not much survey work could be carried out during 1944 due to paucity of doctors as a result of the deputation of a large number to Military duty and the non-availability of suitable substitutes. New focii of infection are still being found during routine work and a great deal of work on scientific lines, for treatment and prevention, remains to be done to control the incidence of *Kala-azar* in the Province.

The number of deaths from *Kala-azar* by districts from 1934 to 1944 is shown in the following table:—

Districts	1934	1935	1936	1937	1938	1939	1940	1941	1912	1943	1944
1	2	3	4	5	6	7	8	9	10	11	12
Cachar	6	7	2	4	5	8	5	32	1	4	31
Sylhet	227	260	173	207	268	152	115	115	154	131	99
Goalpara	61	100	84	135	106	205	174	124	90	90	122
Kamrup	151	176	61	77	104	58	69	62	65	67	32
Darrang	136	91	155	256	256	181	221	100	89	195	117
Nowgoag	78	52	121	196	101	170	161	135	119	152	102
Sibsagar	84	101	99	126	447	553	773	95	202	76	161
Lakhimpur	..	..	..	..	..	1	3	1	3	8	19
Khasi and Jaintia Hills ..	4	..	10	5	5	12	..	1	..	1	..
Naga Hills	..	..	..	..	..	9	3	..	..	1	2
Lushai Hills	..	..	..	..	.	..	..	..	..	..	..
Garo Hills	23	58	47	51	46	47	70	49	78	71	113
Sadiya Frontier Tract ..	..	..	1	..	..	..	..	..	..	..	..
Manipur State	..	..	..	..	..	..	..	..	..	..	..
	770	845	753	1,057	1,338	1,396	1,594	714	701	796	798

The table below shows the number of *Kala-azar* cases treated from 1934 to 1944:—

Districts	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
1	2	3	4	5	6	7	8	9	10	11	12
Cachar	529	478	574	445	716	669	778	1,024	963	935	805
Sylhet	4,612	3,869	3,645	3,672	4,622	4,029	3,386	2,830	3,887	3,624	3,566
Goalpare	1,107	1,245	1,276	2,046	2,541	2,989	3,194	2,761	3,314	2,639	2,178
Kamrup	2,197	1,465	1,309	918	1,189	1,138	1,721	1,215	1,338	1,505	914
Darrang	876	738	636	514	989	861	1,491	1,128	2599	2,393	1,860
Nowgong	1,726	1,651	1,471	2,317	3,265	3,875	5,129	3,593	2,774	3,093	2,758
Sibsagar	1,372	938	864	396	3,050	3,315	4,070	2,640	3,643	3,494	2,747
Lakhimpur ..	18	12	6	2	13	15	15	12	15	50	40
Khasi and Jaintia Hills ..	5	..	..	..	..	..	..	..	..	..	..
Naga Hills	14	7	5	15	39	47	16	8	3	3	..
Lushai Hills	..	..	..	..		..	..	..	..	..	..
Garo Hills	927	690	793	717	824	808	1,346	1'259	1,436	1,472	1,722
Sadiya Frotier Tract ..	1	..	..	2	..	..	..	..	1	..	..
Manipur State ..	14	7	8	7	20	10	3	..	..	..	..
Total ..	13,398	11,100	10,587	12,051	17,268	17,756	21,149	16,470	20,033	19,208	16,590

It will be seen that *Kala-azar* still causes a great deal of morbidity and mortality in spite of much departmental work being directed towards its eradication. Present work is confined to early detection and treatment of cases and serves to prevent deaths or keep down deaths at a low level in a very fatal disease. But nothing is being done to prevent the spread of disease by a direct attack on the transmitting agent. It is hoped that, with the availability of insecticides such as Pyrethrum and D. D. T. this line of attack against the infecting agent in its transmission will be developed. It may be mentioned that, apart from insecticidal spraying, improvement in the sanitation of the village site and the village house and liberal use of lime wash will have considerable effect in making conditions unfavourable to the sandfly.

35. *Leprosy.*—A total of 786 Leprosy cases was treated during the year at the Public Health Department dispensaries as follows :—

District	Number of Lepromatous (Infectious) cases	Number of Neural (Non-infectious) cases	Total No. of cases	Male	Female	Children
1	2	3	4	5	6	7
Sylhet	467	88	575	415	134	26
Goalpara	18	3	21	16	5	21
Kamrup	16	25	41	35	4	2
Nowgong	26	44	70	45	12	13
Sibsagar	13	28	41	31	10	...
Darrang	6	52	58	35	20	3
	546	240	786	577	195	44

In addition approximately 1,500 cases were treated at asylums and other centres of treatment under the Medical Department, Local Boards and Missionary Societies. The Special Leprosy Officer, carried out an intensive Leprosy Survey of an area in the Goalpara district with a population of approximately 3,035, mainly Boros and Santals and detected 157 cases of Leprosy (125 neural, 32 lempromatous.) As a result of this survey one Public Health Department Dispensary with an out-centre was sanctioned by Government for treatment of the cases. Routine propaganda work is carried out by the Special Leprosy Officer and other doctors of the Department and home or village isolation of the infectious cases is encouraged. There is urgent need of a properly equipped and staffed central institution and subsidiary colonies in the Province. More intensive regional Leprosy surveys need to be carried out. For this purpose it is proposed to train more doctors in modern methods of Leprosy control work as opportunity occurs. At present the activities, governmental and others, connected with the control of Leprosy in the Province are far from adequate and an anti-Leprosy scheme has been included in the Post-War Reconstruction Schemes. In this connection mention must be made of the excellent work done by the Borbhetta (Jorhat) and Santipara (Goalpara) Leper Colonies staffed and managed by Christian Missionary Societies.

CHAPTER IV

Epidemiology

36. *Cholera.*—During 1943 Cholera was prevalent in epidemic form in most of the plains districts and this was carried into the early part of 1944, while during the rest of the year incidence of Cholera was mild and sporadic. Sylhet was the most affected district and recorded the highest number of deaths. Total deaths during 1944 were 4,107 as compared to 15,454 during 1943 and 12,806 during 1942. The urban and rural death-rates due to Cholera were 0·42 and 0·38 respectively during the year as compared to 1·09 and 1·60 during 1943. The following statement shows deaths form Cholera by districts during the year :—

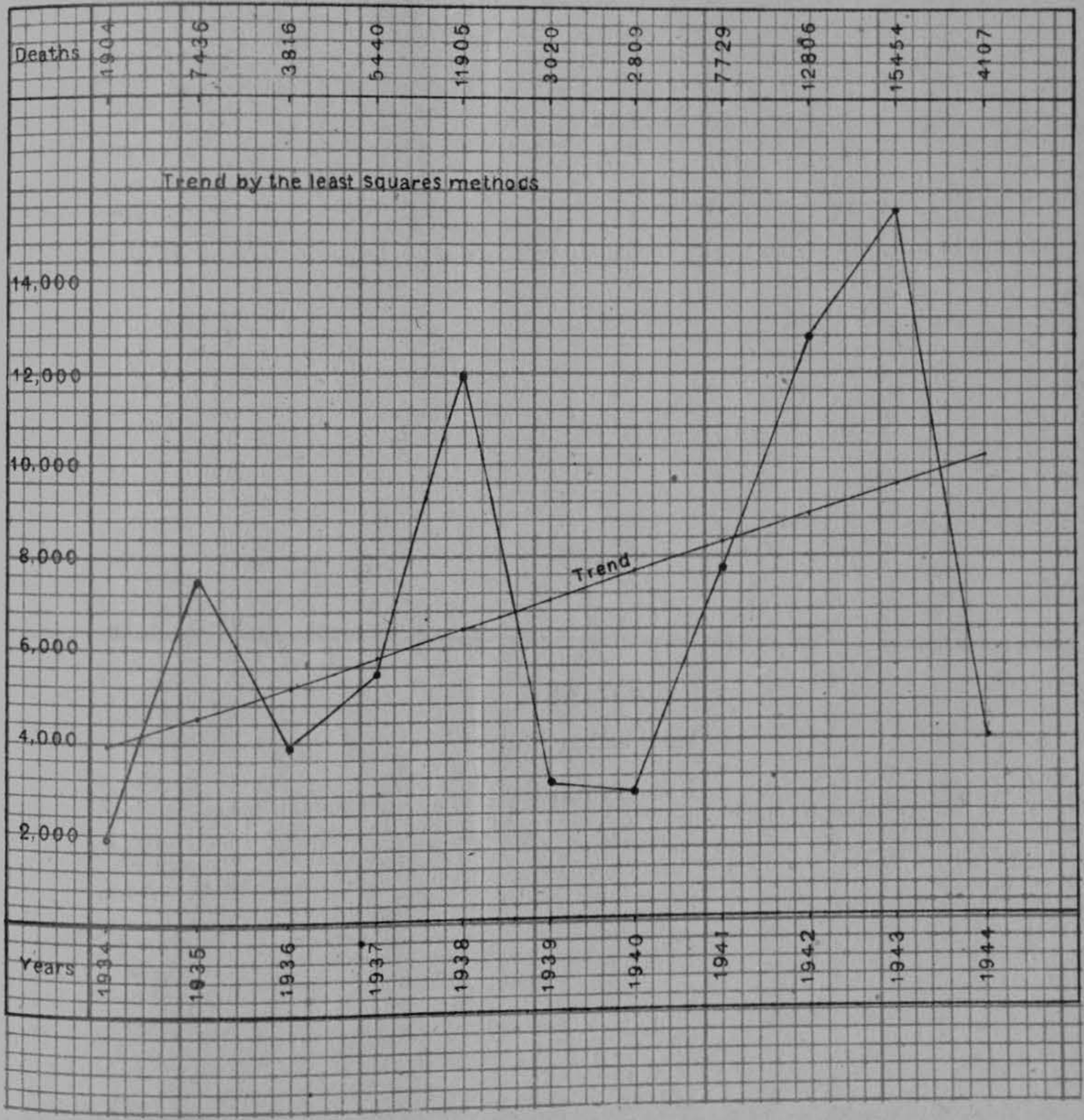
District	Estimated population, 1944	Density of population per Sq. Mile	Number of deaths during 1944	Death-rate 1944
1	2	3	4	5
Cachar	627,451	318	185	0·29
Sylhet	3,247,355	593	3,058	0·94
Goalpara	1,058,129	266	121	0·11
Kamrup	1,360,017	354	191	0·14
Darrang	787,448	278	158	0·20
Nowgong	760,204	195	286	0·38
Sibsagar	1,121,878	218	92	0·08
Lakhimpur	951,595	225	16	0·02
Total	9,914,077	316	4,107	0·41

Figures of deaths from Cholera and rates during the last ten years are given below :—

Year	Number of deaths	Death-rate
1934	1,904	0·24
1935	7,436	0·94
1936	3,816	0·48
1937	5,440	0·69
1938	11,905	1·50
1939	3,020	0·35
1940	2,809	0·32
1941	7,729	0·82
1942	12,806	1·33
1943	15,454	1·58
1944	4,107	0·41

The trend of Cholera mortality is depicted in the graph below :—

TREND OF CHOLERA MORTALITY IN THE LAST 10 YEARS IN ASSAM



37. *Small-pox.*—Small-pox was prevalent in epidemic form in some areas during most of the year throughout the Province. As in the case of Cholera Sylhet district recorded the highest number of deaths (6,536). Total deaths during the year due to Small-pox were 11,728 as compared to 1,692 during 1943 and 294 during 1942. Probable factors responsible for this sharp increase in the incidence of small-pox have been discussed in the previous chapter. This increase may also be due to the influx of unprotected and partially protected population from the adjacent areas of Bengal and the inadequacy of vaccination staff and difficulties of communications which hampered mass vaccination work.

The following statment shows deaths from Small-pox by districts from 1941 to 1944 :—

Distict	Estimated population, 1944	1944		1943		1942		1941	
		No. of deaths	Ratio	No. of deaths	Ratio	No. of deaths	Ratio	No. of deaths	Ratio
1	2	3	4	5	6	7	8	9	10
Cachar	627,451	495	0·79	191	0·31	24	0·04	2	0·003
Sylhet	3,247,355	6,536	2·01	632	0·20	146	0·05	238	0·08
Goalpara	1,058,129	475	0·45	35	0·03	19	0·02	3	0·003
Kamrup	1,360,017	1,291	0·95	153	0·11	43	0·03	69	0·05
Darrang	787,448	221	0·28	50	0·06	12	0·02	6	0·01
Nowgong	760,204	1,706	2·24	516	0·69	29	0·04	25	0·04
Sibsagar	1,121,878	394	0·35	21	0·02	7	0·01	1	0·001
Lakhimpur	951,595	610	0·64	94	0·10	13	0·01	1	0·001
Total ..	9,914,077	11,728	1·18	1,692	0·17	294	0·03	345	0·04

Figures of deaths from Small-pox during the last 10 years are given below :—

Year	Total deaths	Ratio
1934	206	0·03
1935	529	0·07
1936	963	0·12
1937	2,187	0·28
1938	1,649	0·21
1939	2,197	0·26
1940	1,400	0·16
1941	345	2·04
1942	294	0·03
1943	1,692	0·17
1944	11,728	1·18

CHAPTER V

Fairs and Festivals

38. During the year, 24 major fairs or Hindu festivals were held in different parts of the Province where sanitary and water supply arrangements were made or supervised by the Public Health Staff and arrangements made for vaccination and inoculation and other measures for the prevention of epidemic disease. It is gratifying to note that even with the limited facilities and staff available it was possible to ensure at these large and small gatherings freedom from epidemics both during and after the festivals. The annual Brahmaputra Snan at Dhubri was stopped in 1944 due to the prevalence of Cholera in Dhubri town at that time. The Darranga Mela for which a considerable sum was spent for sanitary arrangements, is an annual one which attracts large gatherings and lasts for over two months. It appears to be a complete waste to spend large amounts every year on purely temporary arrangements, and it would be much better from the public health point of view as well as more economical to provide protected water supply and efficient conservancy system on a semi-permanent basis. These two are the essential requirements of a fair or festival and it would be well-worth while to provide these at all places of annual pilgrimage, *e. g.*, Kamakhya Hill, Bhuban Hill, Siddeswar, etc. Permanent sanitary and water supply arrangements at regular places of pilgrimage can be made if all the authorities concerned, *viz.*, Temple authority, Local or Municipal Board and Government contribute their due share. As it is, the Temple authorities receive all the offerings but rarely do anything for the welfare of the pilgrim and most local bodies are either indifferent or offer the plea of lack of funds. So the present temporary arrangements go on from year to year.

CHAPTER VI

Urban Sanitation and water supply

39. Urban Health Officers are provided for nine of the major Municipal towns by the Public Health Department and it is hoped to provide a Health Officer for each Municipal town of over 5,000 population in the near future. The Municipalities also employ Sanitary and Conservancy Inspectors, Vaccinators and other staff for public health duties. In all, there were 18 Municipal Boards and 10 town Committees during the year. Their total income was Rs.1,546,254 of which a sum of Rs.937,035 or 60.60 per cent. of the total income was spent on sanitation and anti-epidemic work as compared to Rs.887,348 or 60·42 per cent. during 1943.

It is noted with regret that the sanitary condition in almost all the towns of the province remained unsatisfactory during the year and no improvement was made in any direction. This was not entirely due to inaptitude or indifference on the part of Municipal bodies concerned, but also because of genuine difficulties in obtaining materials and staff and the pressure of sudden increases in population. A sum of Rs. 11,237 was spent by Public Works Department on the maintenance of water supplies, drainage and town improvement during the year as compared with Rs.6,153 spent during 1943.

40. Only eight towns in the province have water purification and distribution systems. Some of these water supply systems, *e g.*, those in Shillong, Haflong, Kohima and Tura, do not require previous treatment except possibly chlorination during some part of the year. In plains towns, filteration and chlorination is done before distribution, but most of the plants are old, defective and inadequate. No

improvements in the old plants could be carried out during the year due to non-availability of materials and machinery. In the bigger towns, *e.g.*, Gauhati, Tezpur and Jorhat, the water supply plants are almost on the verge of breakdown and even the present supply is unsatisfactory in quality and inadequate in qu,antity. In Municipalities which do not have a piped supply system, water is obtained from "reserved" tanks tube wells or shallow wells. The condition of these has also not been satisfactory due to lack of proper maintenance.

With the return of peace and normal conditions, it is to be hoped that the urgent problem of proper piped water supply system in all Municipal towns will receive due attention of the authorities concerned. Government help may be required and should not be withheld for the installation of new water supply plants or renovation and extension of existing ones.

CHAPTER VII
Rural Sanitation

41. The bulk of the population of Assam, as of other provinces of India, lives in rural areas, but the sanitary conditions of villages remain as primitive as ever. The responsibility for rural sanitation devolves on Local Boards who should pay special attention to the provision of adequate and safe water supplies in the villages, apart from drainage, conservancy service and communications. Unless determined and sustained efforts are made for the betterment of the living conditions of the rural masses, no progress in the country can be expected. The public health measures carried out in the rural areas by the Public Health Staff are protection against Cholera by inoculation and use of bacteriophage and protection against Small-pox by vaccination apart from general sanitary supervision and disinfection of sources of water-supply. The Public Health Department Dispensaries carry out treatment of Kala-Azar, Malaria, Yaws, Leprosy, Dysentery and Diarrhoea, etc., in the rural areas and Anti-Malaria Drugs are also distributed through village Post Offices, Medical aid is also provided by Local Board Dispensaries, but vast rural areas still remain without any heath service, preventive or curative.

A sum of Rs.7,62,427 was spent by Local Boards on public health measures during the year 1944 as against Rs.5,83,485 during the previous year.

Sources of water-supply in rural areas are tanks, streams and nullahs, ring-wells and rarely tube-wells. The so-called "reserved" tanks are often neglected and pure drinking water is hardly ever available in any rural area. During 1939, a total of 511 sources of water-supply was constructed from a g ant made by the Government of India, but it appears that most of these have not been maintained. A Scheme for the provision of at least one protected source of water-supply, *e. g.*, a properly constructed well for each village has been included in the Post-War Reconstruction Schemes.

CHAPTER VIII
Malaria

42. The epidemic of Malaria, which broke out in the Habiganj Subdivision of Sylhet dristrict during 1942 and continued through 1943, was brought under control by about the middle of 1944. The group of villages collectively known as Baniyachong with a population of approximately 40,000 was the worst affected area. It is estimated that about 10,000 lives were lost as a result of this Malaria epidemic. The probable causal factors of the epidemic were:—

(1) Importation of a new strain of malaria parasite by a comparatively large labour population returning from military projects in forwards areas.

(2) Presence of the vactor species of mosquito in abnormally large numbers due to climatic conditions and absence of periodical flushing effect due to the monsoon being less heavy and more spread out during 1943 and 1944

(3) Low resistance of the population due to chronic state of malnutrition and absence of immunity to the new strain of infection.

The Malaria Research Officer of the Assam Medical Research Society was appointed Malariologist in immediate charge of Anti-Malaria measures in this area. A malaria survey was carrid out and anti-adult spraying of all habitations was organised and started in July 1944 and continued vigorously. Treatment centres were opened where not only anti-malaria drugs but also milk, barley and blankets were distributed to the indigent patients. Certain charitable institutions rendered valuable aid in providing staff for manning some of the centres.

Malaria is responsible for a very large percentage of morbidity and mortality in the Province. During the year 104,383 deaths were recorded as due to "fevers" and the cause was mainly Malaria. The total number of Malaria cases treated in Hospitals and Dispensaries throughout the province was 869,993 of which 255,792 were treated in the Public Health Department Dispensaries. During the year, Goalpara district in the Assam Valley also suffered badly due to malaria and recorded 15,626 deaths due to "fevers.

43. The Assam Medical Research Society continued to direct its activities mainly against malaria and provided valuable technical advice to the Public Health Department. As the Malaria Research Officer of the Society was loaned to Public Health Department for appointment as Malariologist for the Habiganj epidemic area, the general activities of the Society were rather restricted during the year. No training class was held during the year. A preliminary malaria survey of Government land adjoining Halem Tea Estate was carried out and the detailed malaria survey of Baniyachong area was continued. During the year 19,093 anopheline larvae of 17 different species and 12,795 adult mosquitoes of 15 different species were identified. Out of 6,508 mosquitoes dissected only two species, *viz*. A Minimus and A. Annularis showed an infectivity rate of 0·37 per cent and 0.02 per cent. respectively. Out of 1,658 children (2 to 10 years) examined 1,184 or 71·4 per cent. were found with enlarged spleens. Infant index among 104 infants examined was 17·3 per cent.

44. *Sale of Quinine.*—The sale of quinine and its substitutes remained under Government control under the supervision of the Director of Public Health. Distribution of the drugs was centralised at the Public Health Laboratory, Shillong. Considering all circumstances, the province was not badly off during the year for the supply of quinine and other Anti-Malaria Drugs. Quinine and Cinchona being in short supply, efforts were continuously made with some success to popularise Mepacrine in place of quinine.

During the year 2,861 packets of Quinine Reinforced Cinchona Febrifuge tablets were sold through Post Offices and other rural agencies throughout the province as compared with 1,817 packets sold during 1943. The supply of these packets had to be stopped from October due to non-availability of these tablets and a Scheme to substitute Mepacrine was taken up but did not materialise during the year.

A Statement showing separately quantities in pounds of Quinine and secondary alkaloids of Cinchona distributed free or at reduced price by the Public Health and Medical Departments and other sources during the year 1944 is appended.

Statement showing separately quantities in lbs. of (a) Quinine and (b) secondary alkaloids of Cinchona distributed free or at reduced price by the Public Health and Medical Departments and other sources during 1944

Districts	Public Health Department				Medical Department				Jail Department			
	Quinine		Cinchona		Quinine		Cinchona		Quinine		Cinchona	
	Free	On payment	Free	On payment	Free	On payment	Free	On payment	Free	On payment	Free	On payment
	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.
Cachar	50 4 0 0	..	13 0 0 0	..	19 0 0 0	..	7 0 0 0	..	2 0 0 0	..	2 0 0 0	..
Sylhet	1,204 10 0 0	144 9 2 0	200 10 4 0	..	39 8 0 0	..	28 8 0 0	..	11 4 0 0	..	9 4 0 0	..
Goalpara	48 7 0 0	..	23 2 0 0	..	142 14 0 0	..	93 15 0 0	..	3 8 0 0	..	2 8 0 0	..
Kamrup	126 0 0 0	..	83 0 0 0	..	..	..	..	—	..	..	..	..
Darrang	28 0 0 0	..	6 0 0 0	..	3 0 0 0	..	5 0 0 0	..	26 0 0 0	..	26 0 0 0	..
Nowgong	44 1 3 0	..	24 7 7 0	..	136 2 4 0	..	62 1 6 0	..	3 0 0 0	..	1 10 0 0	..
Sibsagar	67 5 0 0	..	35 11 0 0	..	31 14 0 0	..	27 14 0 0	..	3 4 0 0	..	5 0 0 0	..
Lakhimpur	98 0 0 0	99 0 0 0	47 0 0 0	2 0 0 0	..	..	..	..	..	..	..	..
Khasi and Jaintia Hills ..	..	..	..	..	1 0 0 0	..	1 0 0 0	..	..	..	..	..
Naga Hills	..	..	..	..	67 8 0 0	..	56 0 0 0	..	..	..	..	..
Lushai Hills	..	..	..	..	37 0 0 0	..	30 0 0 0	..	..	..	..	..
Garo Hills	6 2 0 0	..	4 15 0 0	..	46 8 0 0	..	17 4 0 0	..	0 12 0 0	..		..
Sadiya Frontier Tract ..	..	..	..	..	23 3 0 0	..	8 4 0 0	..	..	..	..	..
Total ..	1,672 13 3 0	243 9 2 0	437 14 3 0	2 0 0 0	547 9 4 0	..	336 14 6 0	..	49 12 0 0	..	46 6 0 0	..

Districts	Police and Assam Rifles Hospitals				Local Fund				Other Departments			
	Quinine		Cinchona		Quinine		Cinchona		Quinine		Cinchona	
	Free	On payment	Free	On payment	Free	On payment	Free	On payment	Free	On payment	Free	On payment
	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.	Lbs. oz. dr. gr.
Cachar	13 0 0 0	..	7 0 0 0	..	110 0 0 0	..	41 0 0 0	..	..	..	..	..
Sylhet	9 0 0 0	..	3 0 0 0	..	224 0 0 0	27 0 6 0	99 8 0 0	18 12 0 0	6 0 4 0	..	4 10 4 0	..
Goalpara	4 12 0 0	..	3 4 0 0	..	..	..	..		77 0 0 0	..	29 9 0 0	..
Kamrup	..	..	..	..	..	..	..	..	..	..	..	..
Darrang	..	..	..	..	129 0 0 0	..	85 0 0 0	..	..	..	..	..
Nowgong	7 0 0 0	..	2 0 0 0	..	..	..	..	..	29 13 0 0*	..	..	..
Sibsagar	3 14 0 0	..	1 0 0 0	..	..	..	..	..	1 0 0 0	..	1 0 0 0	..
Lakhimpur ..	..	..	..	..	..	..	..	..	..	..	..	..
Khasi and Jaintia Hills..	..	..	..	..	..	..	..	..	..	..	..	..
Naga Hills	6 0 0 0	..	2 0 0 0	..	..	..	..	..	15 4 0 0	..	12 0 0 0	..
Lushai Hills	..	..		..	..	..	..	..	..	..	..	..
Garo Hills	3 2 0 0	..	1 8 0 0	..	..	..	..	..	..	..	..	..
Sadiya Frontier Tract ..	23 14 0 0	..	15 13 0 0	..	6 11 0 0	..	1 9 0 0	..	..	..	..	..
Total ..	70 10 0 0	..	35 9 0 0	..	469 11 0 0	27 0 6 0	227 1 0 0	18 12 0 0	129 9 1 4	..	47 3 4 0	..

* Assam Forest 1,000 Pills of Quinine Sulph. of 5 Gr. each from Public Works Department Dispensary.

CHAPTER IX.

Maternity and child welfare

45. Maternity and child welfare organisation in the Province continues to be in the hands of the Red Cross Society, which is doing fairly good work with the help of other philanthropic institutions and in co-operation with local bodies. There is need for a bigger grant by the Government and closer liaison between the Society and the Public Heath Department. At present maternity and child welfare activities are limited to the provision of welfare centres in some towns, *e.g.*, Shillong, Sylhet, Silchar, Jorhat, Tezpur. Much remains to be done in this field throughout the Province. There is no recognised institution within the Province for the training of midwives. The centres at Sylhet and Silchar provide courses of training for dhais and midwives. A certain number of these trained girls are absorbed each year by the tea industry or by local bodies.

During the year the infantile mortality rate was 161·95 and a rough estimate of maternal mortality rate may be taken as 18·22 per 1,000 births. Apart from Shillong which shows a satisfactorily low maternal mortality rate, none of the larger towns, *e.g.*, Sylhet, Gauhati, Dibrugarh from where such figures are available, recorded any better rates than the rural areas. Defective and incomplete registration in rural areas may account for this.

During the year there were 14 welfare centres, 11 urban and 3 rural. The staff employed at these centres consisted of 3 health visitors, 31 trained midwives and 18 trained dhais.

CHAPTER X

School hygiene and medical inspection of school children

46. Systematic medical inspection of school children is not yet undertaken by this Department which does not possess a cadre of School Health Officers. Schools were visited and children inspected from time to time during the course of their routine work by Assistant Directors and District and Subdivisional Medical Officers of Health. These visits are mainly directed towards the sanitary conditions of the School buildings and their surroundings and very little time is available for routine medical inspection of the pupils. A proposal has now been put forward and it is hoped that this important branch of public health service will come into being in the near future with a cadre of School Health and Assistant School Health officers spread over the whole Province.

Instruction in elementary hygiene and sanitation is now imparted in both primary and secondary schools, lectures and talks on health and hygiene and physical welfare are given to the school children by the Public Health visiting staff as opportunity occurs.

CHAPTER XI

Health propaganda

47. As in previous years health propaganda work was carried out, mainly in the rural areas, by the Public Health Staff of each district with the aid of magic lantern demonstrations and public health stalls and exhibitions at fairs and festivals and other public gatherings. In some areas, especially in Cachar District, successful efforts were made by the district health staff towards propagation of health, education and betterment of village sanitary conditions by the formation of village health and sanitation committees elected by the villagers. Regular meetings were held and much interest was shown in ways and methods of improving sanitary conditions.

In has now been decided to centralise all publicity and propaganda work of Government Departments under a Publicity Department which will have a network of staff and modern mobile equipment in every district with its organisation extending to all rural areas. If this scheme materialises it is hoped to carry health propaganda to every village in the Province.

48. *Provincial Tuberculosis Association.*—Steady progress was maintained in the activities of the Association during the year. There is more general interest in the Association's efforts throughout the Province which was reflected by the considerable increase in membership during the year, including the enrolment of His Highness The Maharaja of Tripura as a patron. Donations during the year, which varied from 4 annas to Rs. 500, amounted to Rs. 11,461 and Rs. 7,000 has been offered for the construction of an indigent patients' ward in the chest Hospital. Accommodation at the Chest Hospital has increased from 28 to 47 but difficulty was experienced in maintaining adequate nursing staff. During the year Clinic No. 2 the Bijoyendra Clinic was opened at Dibrugarh and did good work with the aid of a healh visitor trained by the Association in Shillong. The total number of admissions to the Chest Hospital during the year was 37 and the number of discharges was 20 ; 726 attended No. 1 Clinic at Shillong and 226 attended No. 2 Clinic at Dibrugarh.

Dr. P. V. Benjamin visited the Chest Hospital during the year and outlined a scheme for the admission of military patients and approved the Hospital for the purpose. A number of employees of the Oil Industry of Digboi have been treated at the Hospital since its opening, and the Company have now agreed to re-employ discharged patients who are certified by the Association and their own doctors as fit for such re-employment. This is a big step forward and it is hoped that other large Incisutrial concerns will follow this example.

Anti-Tuberculosis propaganda was carried on as usual during the year.

CHAPTER XII

Public Health Administration.

49. The year 1944 was a landmark in the development of Public Health administration in the Province. With the re-organisation of the Department, the control of public health activities in the eight plains districts was taken away from the Civil Surgeons and placed in the charge of District Medical Officers of Health, who were made directly responsible to the respective Assistant Directors of Public Health. The bigger

Subdivisions were placed in charge of Subdivisional Medical Officers of Health under the District Medical Officers of Health. The Hills districts are still without District Health Officers and the Civil Surgeons act as such so far as their other duties permit. The re-organisation was, unfortunately, carried out on an almost "no extra cost" basis and much re-casting involving higher expenditure is necessary before a strong public health organisation becomes established even in the eight plains districts. During the year there was acute shortage of staff due to a large number of doctors having been deputed for Military service and the difficulty of obtaining suitable substitutes.

50. The budget allotments for the years 1943-44 and 1944-45 amounted to Rs. 9,24,300 and Rs. 14,49,100 respectively. The increased allotment for 1944-45 was due mainly to the purchase of Quinine for controlled distribution in the Province.

The strenght of the technical personnel of the Public Health Department during the year was as follows:—

Director of Public Health	
Assistant Directors of Public Health	3
District Medical Officers of Health (including one incharge of Public Health Laborartory, Shillong).	9
Subdivisional Medical Officers of Health (Licentiates)	11
Urban Health Officers (Licentiates)	9
Sub-Assistant Surgeons, on Epidemic, Malaria or General Public Health duty (including Public Health Dispensaries and Hospitals).	121
Special Leprosy Officer (Licentiate).	1
Biochemist (M.Sc.)	1
Statistician (M.A.)	1
Rural Health Inspectors (Trained Matriculates)	61
Assistant Rural Health Inspectors (including 14 temporary)	34

The Shillong Municipal Board employs a qualified Health Officer (M.B., D.P.H.) whose salary is met in part by a contribution from Government.

CHAPTER XIII

Vaccination

51. As in last year's report, this chapter and the statistical tables connected with it refer to the calendar year, 1944.

Vaccination was carried on, as usual, throughout the Province including Indian States and excluded and partially excluded areas. Routine vaccination was suspended during the hot, rainy months except in Small-pox affected localities and areas. The lymph used for vaccination is prepared and supplied by the Government Vaccine Depôt, Shillong and the instrument used is the rotary lancet.

52. *Establishment and total Number of Operations performed.*—Among the general population, vaccination was performed by 596 Vaccinators, *viz.*, 457 Local Board, 29 Municipal Board, 2 Development Board and 108 Government Vaccinators. The number of Vaccinators employed by the Manipur Durbar is not known. Among the labour force employed by the Tea Industry, Railway, etc., and in Jails, Asylums, etc., vaccination was performed by their respective Medical Staff. The Rural and Assistant Rural Health Inspectors were also employed for vaccination work whenever necessary.

The total number of vaccination operations performed (or recorded as performed) in the Province during 1944 by all agencies was 1,907,871 of which 532,098 were primary and 1,375,773 re-vaccinations as compared to a total of 1,452,776 (426,033 primary and 1,026,743 re-vaccinations) during the preceding year There was an increase of 455,095 total vaccination operations as compared to the previous year.

The total number of operations performed by all agencies during the year 1944 and the previous year is classified in the following statement:—

	1944	1943
A. PRIMARY VACCINATION—		
(1) Successful—		
(*a*) Age 0-1 year ...	86,798	80,971
(*b*) ,, 1-5 years ...	289,806	226,489
(*c*) ,, 5-10 ,, ...	80,261	79,685
Total of successful primary vaccination ...	467,525	387,887
Total primary vaccinations ...	532,098	426,033
B. REVACCINATION—		
Successful ...	789,530	620,440
Total revaccination ...	1,375,773	1,026,743
Grand Total ...	1,907,871	1,452,776

During the year out of a total of 166,276 live births 139,347 infants survived the first year of life but only 86,798 were successfully vaccinated giving a percentage of 62·29 successful primary vaccinations. It appears that about one-third of the total number of infants remain unprotected annually—mainly in the rural areas. This is probably true of all age groups and a very large proportion of the population in Assam is still unprotected and vulnerable. The remedy lies in the compulsory registration of births and deaths and compulsory primary vaccination in all areas—urban and rural.

A total of 4,733 vaccination operations was performed by the Dispensary staff during the year (1,875 primary and 2,858 re-vaccinations) as compared with a total of 9,413 (1,328 primary and 8,085 re-vaccinations) during the previous year.

53. *Vaccination Work by Districts.*—The table below shows increase or decrease in vaccination operations performed in individual districts as compared with the preceding year :—

	1944	1943	+ Increase — Decrease
Cachar	126,384	132,790	— 6,406
Sylhet	650,980	305,451	+ 345,529
Goalpara	138,356	79,447	+ 58,909
Kamrup	174,248	112,535	+ 61,713
Darrang	162,447	125,391	+ 37,056
Nowgong	226,855	124,708	+ 102,147
Sibsagar	145,583	179,808	— 34,225
Lakhimpur	96,396	195,296	— 98,900
Khasi and Jaintia Hills	76,142	82,437	— 6,295
Naga Hills	26,387	35,778	— 9,391
Lushai Hills	17,674	12,730	+ 4,944
Garo Hills	15,717	16,533	— 816
Manipur State	43,885	40,663	+ 3,222
Sadiya Frontier Tract	6,817	8,689	— 1,872
Balipara Frontier Tract	N.R.	520	— 520
Total	1,907,871	1,452,776	+ 455,095

Although the total number of vaccinations among the general population was larger during 1944 as compared to 1943, some districts show considerable decreases and in almost all cases this was due to the direct or indirect effect of war conditions or the impact of battle during the first half of 1944.

54. *Vaccination in Rural Areas.*—Vaccination is not compulsory in rural areas in Assam, but every facility and encouragement is given to the people to get themselves vaccinated. Some opposition to vaccination is still met within certain areas especially during non-epidemic periods. To overcome this hostile attitude and give effect to mass vaccination, regulations under the Epidemic Diseases Act, 1897 are brought into force in the affected areas. During the year the following areas were declared as Small-pox infected areas—Districts of Darrang, Lakhimpur and Nowgong; Karimganj, Sunamganj and South Sylhet Subdivisions of the district of Sylhet; and areas under Lakhipur, Bilasipara, Dhubri and South Salmara thanas in Goalpara district.

It must be mentioned that vaccination has been made compulsory in 16 villages of the Mikir Hills (Nowgong district) and certain villages administered by village authorities in the districts of Sibsagar, Nowgong and Sylhet.

55. *Vaccination in Municipal Towns.*—In towns, where vaccination is compulsory, out of 5,126 infants who survived 2,277 or 44·42 per cent. were successfully vaccinated as compared to 56·60 per cent. during the previous year. This low percentage of successful infantile vaccination to registered births in compulsory areas reveals a very unsatisfactory state of affairs as regards municipal interest in health affairs of the citizens. The percentage of successful infantile vaccination for the whole Province was 62·29 during 1944 and there is no reason to doubt the potency of the lymph as issued by the Government Vaccine Depot. The failures are almost wholly due to faulty technique or use of time expired impotent lymph. The following towns recorded exceptionally low percentage of successful infantile vaccination :—

Habiganj (9·55), Sunamganj, (22·27), Shillong (30·21), Gauhati (22·48), Palasbari (10·90), Nalbari (16·05), Mangaldai (22·22), Nazira (2·53), North Lakhimpur (30·61) ;

While the following towns recorded high percentage of successful vaccination :—

Karimganj (100·00), Maulavibazar (79·76), Dhubri (76·47), Jorhat (75·49), Golaghat (100·00), Doom Dooma (100·00), Tinsukia (88·89).

56. *Percentage of successful operations.*—The percentage of successful operations performed by all agencies during the year was 92·57 for primary vaccinations and 67·35 for re-vaccinations as compared to 94·65 and 68·29 respectively in the preceding year.

57. *Inspection of vaccination.*—The subordinate inspecting staff was the same as in the previous year upto 31st March 1944, *Viz*: 9 Inspectors and 30 Sub-Inspectors of vaccination. From 1st April 1944 these, together with the Epidemic Assistants, were formed into one cadre of Rural Heath Inspectors (Matriculates) and Assistant Rural Health Inspectors (Uuder-Matriculates). These Health Inspectors carried out the subordinate inspection of vaccination apart from their other duties. Their average strength during the year was 89. The Subdivisional and District Medical Officers of Health also carried out inspections of primary vaccinations and re-vaccinations during their tours.

58. *Deaths from Small-pox.*—The total number of deaths due to Small-pox during the year in the whole Province including Hill districts was 12,091 (eight plains districts—11,728, Hill districts—363) as compared to 1,770 (plains districts—1,692, Hill districts—78) during the pevious year. The ratio of deaths from Small-pox for the whole Province was 1·21 per mille of population as compard to 0·17 in the previous yea The following statement gives mortality figures due to Small-pox by districts as compiled from the vit statistical returns and it is probable that these figures include deaths from Measles and Chicken-pox.

	Deaths under 1 year	Deaths between the ages of one to ten	Total number of deaths
Cachar	35	41	495
Sylhet	372	560	6,536
Goalpara	22	14	476
Kamrup	1	...	1,291
Darrang	6	26	221
Nowgong	225	432	1,706
Sibsagar	18	51	394
Lakhimpur	26	30	610
Khasi and Jantia Hills	1	...	17
Naga Hills	...	...	1
Lushai Hills	...	...	6
Garo Hiils	21	15	225
Manipur State	Not known	...	114
Sadiya Frontier Tract	...	Nil	...
Balipara Frontier. Tract	...	Not known	...
Total ...	727	1,169	12,091

A graph is attached which shows the death-rate due to Small-pox by districts together with the numbers protected by vaccination per 10,000 of population during the period 1938 to 1944.

59. *Government Vaccine Depot, Shillong.*—This brief report of the working of the Vaccine Depot refers to the financial year 1944-45 and not to the calendar year 1944.

The total amount of vaccine manufactured in the Vaccine Depot during the year was 2,934,723 capillary tubes (each sufficient to vaccinate one person) as compared with 2,980,160 tubes in the previous year. The number of tubes issued during the year to both Civil and Military indentors was 2,872,695, as compared to 2,951,195 tubes issued during 1943. During the year 1,097 cow calves and 20 buffalo calves were hired for all purposes. *Viz*, seed lymph, vaccine lymph, potency tests, etc,. Lymph was taken from 739 cow calves including 19 inoculated calves of the previons year, 111 calves were used for potency tests, 241 became sick, 3 died and 22 failed. The average number of tubes prepared per calf during the year was 3,974 as against 3,860 in the previous year. The average yield per calf was 39·46 grammes as compared to 38·42 in the previous year. All the batches were tested for potency before despatch and gave uniformly "continuous" result. Field tests on children gave 100 per cent. insertion success and bacteriological tests were satisfactory throughout.

The total working cost of the Vaccine Depot during the year was Rs.82,247 as compared to Rs.64,576 during the previous year. There was heavy demand for vaccine lymph throughout the year and the staff had to work overtime for a considerable period. The subordinate charge of the Depot was held by Dr. P. C. Barooah, whose work continued to be satisfactory. The Director of Public Health, Assam is also the Officer-in-charge of the Vaccine Depot, Shillong.

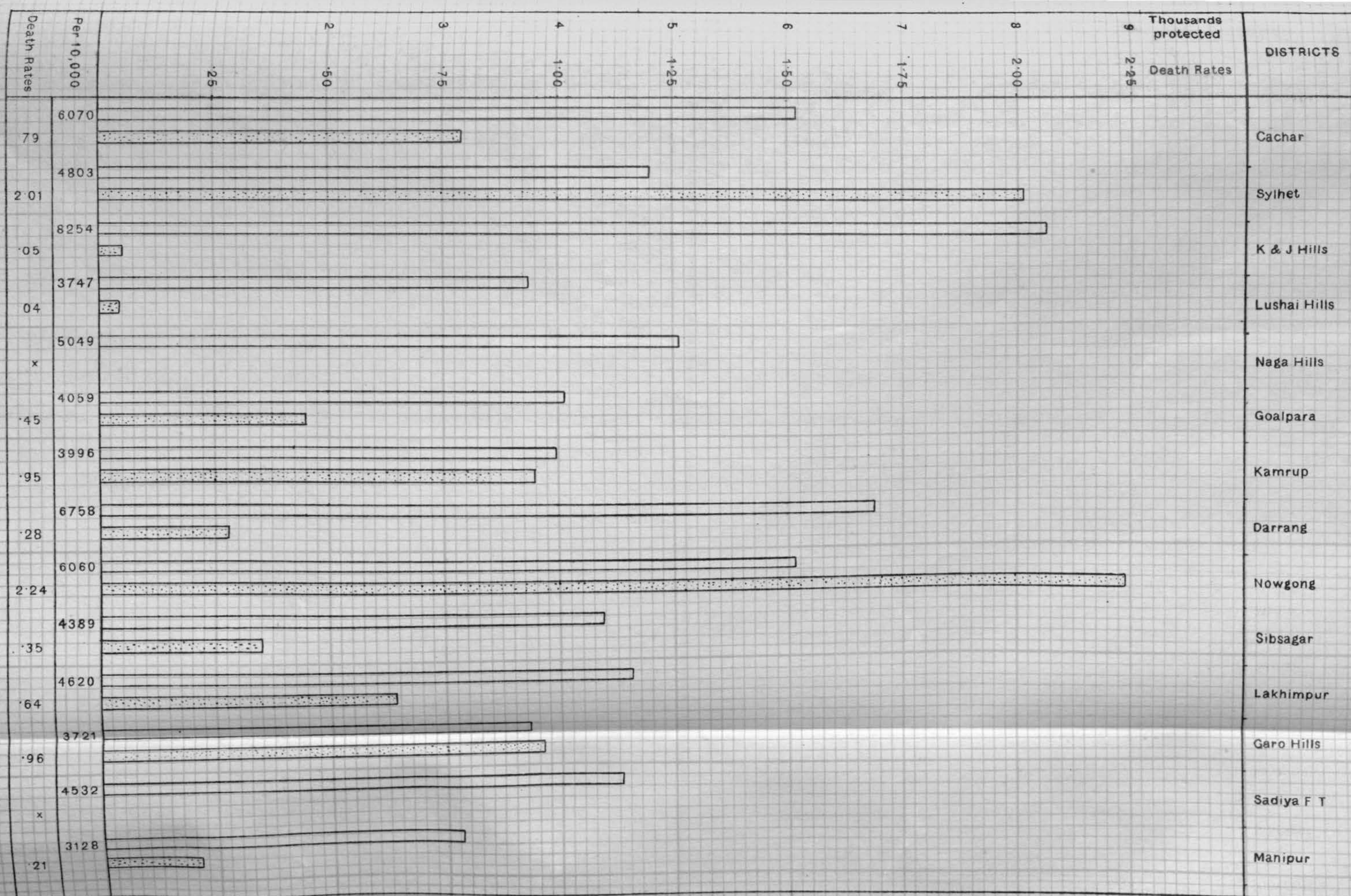
CHAPTER XIV

Other public Health Services

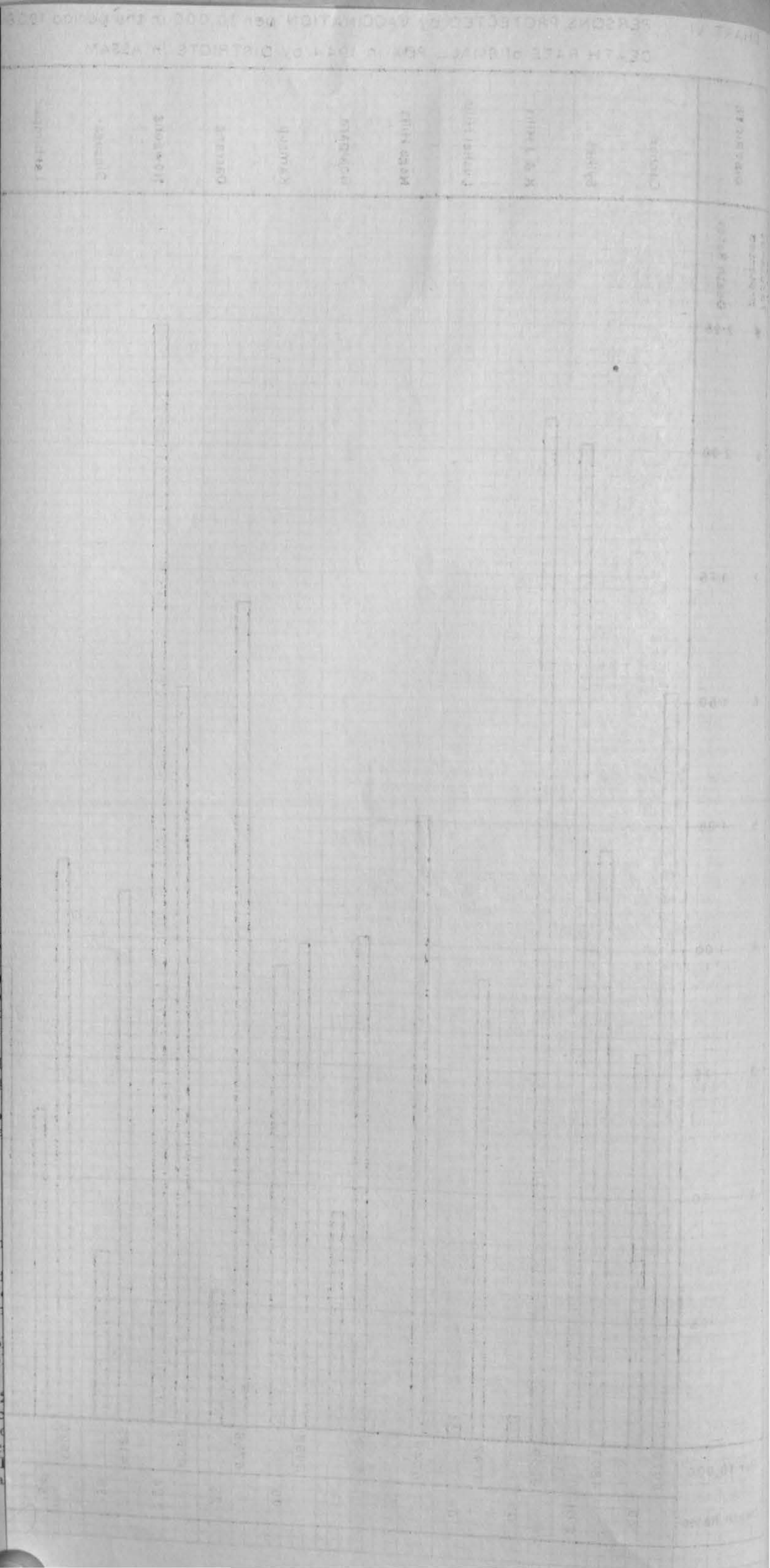
60. *Industrial Hygiene.*—Cultivation and manufacture of tea is the principal industry of the Province. The Oil Industry is centred at Digboi. Sanitary conditions of the labour colonies in the larger tea estates are fairly satisfactory but there is much room for improvement in the housing conditions. Sanitation in factories and offensive trades is conrtolled by the Indian Factories Act and the Assistant Directors of Public Health are additional Inspectors of Factories within their respective jurisdiction. The inspection of factories is now done systematically by the Public Health Staff but action on the recommendations made in the inspection reports is not always carried out fully or promptly. With the return of peace and normal conditions it will be possible to give as much attention to the welfare of industrial workers as they deserve.

61. *Mines.*—No mines were inspected by any of the Public Health Staff during the year. There are no mines in the Surma Valley Division.

62. *Food Adulteration.*—During 1944 a total of 156 samples of food-stuffs was received and analysed by the Public Analyst as compared to 216 during the previous year. One hundred and twenty-one samples were received from the Municipal Boards, 6 from Local Boards, 2 from Town Committees and 27 from other sources (Military, Tea Gardens, etc.). Of the total number analysed 111 samples were found to be adulterated. The number of convictions secured by the Local Bodies under the Assam Pure Food Act was 92 and the total amount imposed as fines was about Rs. 2,300 during the year.



DEATH RATE of SMALL POX in 1944 by DISTRICTS in ASSAM



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From the following local bodies samples of food-stuffs as given against each were received during the year:—

Municipal Boards :—

Dhubri (16), Tezpur (10), Nowgong (4), Jorhat (8), Dibrugarh (12), Shillong (2), Karimganj (20), Silchar (34), Sylhet (11), Habiganj (2) and Maulavibazar (2).

Local Boards :—

Nowgong (2), Karimganj (2), Sunamganj (2).

Town Committees :—

Mangaldai (3) and Srimangal (1).

Considering the extent of adulteration prevalent all over the Province, it would be obvious that many of the Municipalities and most of the Local Boards did not take adequate action under the Pure Food Act in order to prevent the sale of adulterated food-stuffs.

63. *Public Health Laboratary.*—The following statement shows the work done at the Public Health Laboratory, Shillong during the year—

Chemical Analysis of Water	74
Chemical Analysis of food-stuffs	156
Bacteriological Examination of Water	258
Bacteriological Examination of Vaccine Lymph	313
Chemical Examination—Miscellaneous	5
Total	806

Details of food-stuffs analysed during the year are given below :—

Name of food-stuff	Number of examined	Number found adulterated
Sugar	1	0
Mustard Oil	93	71
Ghee	28	24
Milk	30	16
Moida and Atta	3	0
Tea	1	0
Total ...	156	111

The Public Health Laboratory also worked as the Provincial Depot for the supply of Urea Stibamine and Collin's Syringes to all the Dispensaries and Hospitals in the Province. The Laboratory also continued to work as the Government Quinine Depot for the distribution of Quinine and other Anti-Malaria Drugs to the whole of the Province. During the year 12,687 lbs. of Quinine, 10,327,585 tablets of Mepacrine/Quinacrine/Atabrine and 2,610 boxes of Quinine Re-inforced Cinchona Febrifuge Tablets were distributed. The value of these drugs, including those issued in bulk to the Tea Industry, was approximately Rs. 8,13,500.

CHAPTER XV

General Remarks

63. The year 1944 was characterised by a slight decrease in the rainfall and a substantial increase in the price of food-stuffs. Shortage of food especially fresh food and other necessities of life combined with a certain amount of economic distress consequent on war conditions was felt throughout the Province. There was a slight increase in the death-rate while the birth-rate fell appreciably. Deaths exceeded births during the year. Infantile mortality rate rose from 131·02 during 1943 to 161·95 during 1944. As compared with the previous year the death-rate from Cholera was lower and from Small-pox appreciably higher during 1944. The Malaria epidemic situation in the Baniyachong area of the Habiganj Subdivision was brought under control during the year, though the toll of life due to "Fevers" remained as high as ever. Free distribution of Quinine and Mepacrine was extended to all severely affected areas. Shortage of staff was felt in all activities of the Department.

64. *Research work.*—The Assam Medical Research Society carries on research work especially in Malariology, but during the year its activities were restricted due to the Malaria Research Officer being loaned for Baniyachong Anti-Malaria measures. The Director of the Pasteur Institute, Shillong also carried out a certain amount of research work on Kala-Azar and the Bionomics of the Sandfly. Naga Sore enquiry sponsored by Indian Research Fund Association is being conducted under the Director, Pasteur Institute and some progress has been made in the epidemiology and bacteriology of the disease during the year.

65. *Public Health Legislation.*—A Public Health Act has not yet been framed for the Province. No Legislation affecting public health matters was passed during the year. The Assam Pure Food Act is in urgent need of amendment and consolidation and it is hoped to take up this work next year.

66. *Personnel.*—The executive and ministerial staffs of the Department continued to work satisfactorily inspite of many difficulties and handicaps. Bigger and better accommodation for the office is urgently required.

Dr. S. H. Paul, M.R.C.S., D.P.H., D.T.M., held the office of Director of Public Health till the 2nd day of November, 1944, when he proceeded on leave preparatory to retirement. I was in charge during the rest of the year.

SHILLONG,
7th November, 1945.

T. D. AHMAD, *Major, I.M.S.,*
Director of Public Health, Assam.

A. G. P. (D. P. H.) No.8—340—5-12-1946.

STATEMENT No. I—*Statement showing the births registered in the districts of Assam during the year 1944*

No.	Districts	Estimated population			Grand total number of births registered			Ratio of births per 1,000 of population			Number of males born to every 100 females born	Mean ratio of births per 1,000 during the previous five years		
		Male	Female	Total	Male	Female	Total	Male	Female	Total		Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	SURMA VALLEY													
1	Cachar ...	300,867	296,584	627,451	7,887	7,344	15,231	13·57	11·70	24·27	107	15·85	14·97	30·82
2	Sylhet	1,697,206	1,550,149	3,247,355	34,882	31,442	66,324	10·74	9·68	20·42	111	14·64	13·41	28·05
	Total ...	2,028,073	1,846,733	3,874,806	42,769	38,786	81,555	11·04	10·01	21·05	110	14·83	13·67	28·50
	ASSAM VALLEY													
3	Goalpara ...	562,491	495,638	1,058,129	9,960	8,750	18,710	9·41	8·27	17·68	114	14·67	13·73	28·40
4	Kamrup ...	726,757	633,260	1,360,017	6,402	5,527	11,929	4·71	4·06	8·77	116	7·39	6·83	14·22
5	Darrang ...	420,184	367,264	787,448	5,606	5,420	11,026	7·12	6·88	14·00	103	13·11	12·45	25·66
6	Nowgong ...	407,018	353,186	760,204	4,419	3,915	8,334	5·81	5·15	10·96	113	9·74	8·96	18·70
7	Sibsagar ...	595,358	526,520	1,121,878	11,000	10,214	21,214	9·89	9·11	18·91	108	12·45	11·90	24·35
8	Lakhimpur ...	513,829	437,766	951,595	6,893	6,615	13,508	7·24	6·95	14·19	104	12·39	11·80	24·19
	Total ...	3,225,637	2,813,634	6,039,271	44,280	40,441	84,721	7·33	7·30	14·03	109	11·49	10·82	22·31
	Total for the province.	5,253,710	4,660,367	9,914,077	87,049	79,227	166,276	8·78	7·99	16·77	110	12·84	11·96	24·80

STATEMENT No. II—*Statement showing the deaths registered in the districts of Assam during the year 1944*

No.	Districts	Area in square miles	Average population per square mile	Number of deaths registered			Deaths per 1,000 of population from—											Mean ratio of deaths per 1,000 during the previous five years		
				Male	Female	Total	Cholera	Small-pox	Plague	Fevers	Dysentery and diarrhœa	Respiratory diseases	Injuries	All other causes	All causes			Male	Female	Total
															Male	Female	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	SURMA VALLEY																			
1	Cachar ...	1,972	318	8,276	7,679	15,955	·29	·79	...	13·77	2·41	·99	·21	6·97	25·01	25·89	25·43	19·96	21·10	20·50
2	Sylhet	5,478	593	40,416	35,743	76,159	·94	2·01	...	14·11	1·33	·26	·21	4·59	23·81	23·06	23·45	19·94	19·10	19·54
	Total ...	7,450	520	48,692	43,422	92,114	·84	1·81	...	14·05	1·51	·38	·21	4·87	24·01	23·51	23·77	19·94	19·42	19·66
	ASSAM VALLEY																			
3	Goalpara ...	3,985	266	9,601	7,271	16,872	·11	·45	...	14·77	·10	·11	·05	·36	17·07	14·67	15·95	20·62	19·92	20·29
4	Kamrup ...	3,844	354	5,600	4,596	10,196	·14	·95	...	5·12	·41	·19	·06	·63	7·71	7·26	7·50	9·68	9·88	9·77
5	Darrang ...	2,842	278	6,228	5,979	12,207	·20	·28	...	10·21	1·73	·64	·15	2·29	14·82	16·28	15·50	18·79	20·05	19·16
6	Nowgong ...	3,896	195	4,187	3,722	7,909	·38	2·24	...	6·26	·47	·16	·12	·77	10·29	10·54	10·40	13·22	13·82	13·50
7	Sibsagar ...	5,131	218	7,410	7,217	14,627	·08	·35	...	7·75	1·20	·71	·16	2·79	12·44	13·71	13·04	14·25	15·25	14·72
8	Lakhimpur ...	4,234	225	6,911	6,372	13,283	·02	·64	...	6·16	1·61	1·36	·23	3·94	13·45	14·55	13·96	14·45	16·25	15·27
	Total ...	23,932	252	39,937	35,157	75,094	·14	·78	...	8·27	·87	·51	·14	1·72	12·38	12·49	12·43	14·87	15·53	15·17
	Total for the province.	31,382	316	88,629	78,579	167,208	·41	1·18	...	10·53	1·12	·46	·17	3·00	16·87	16·86	16·87	16·88	17·12	16·99

STATEMENT No. III—*Deaths registered in the districts Assam during each month of the year 1944*

No.	Districts		Estimated Population	January	February	March	April	May	June	July	August	September	October	November	December	Total deaths registered during the year 1944
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Surma Valley															
1	Cachar ..	Urban ..	22,810	32	30	34	24	21	24	27	34	18	27	23	26	320
		Rural	604,641	1,386	1,141	1,115	1,087	1,337	1,606	1,587	1,414	1,139	1,302	1,299	1,225	15,635
		Total ..	627,451	1,418	1,171	1,149	1,111	1,355	1,630	1,614	1,448	1,157	1,329	1,322	1,251	15,955
2	Sylhet.. ..	Urban ..	69,484	79	62	64	71	555	494	63	65	39	90	81	78	1,741
		Rural	3,177,871	8,795	6,750	6,710	6,646	5,900	5,985	6,090	6,234	4,654	5,674	5,027	5,953	74,418
		Total ..	3,247,355	8,874	6,812	6,774	6,717	6,455	6,479	6,153	6,299	4,693	5,764	5,108	6,031	76,159
3	Goalpara ..	Urban ..	35,594	47	68	51	37	38	44	32	54	41	51	67	55	585
		Rural	1,022,535	1,544	1,336	1,140	1,321	1,189	1,583	1,768	1,387	1,132	1,361	1,250	1,276	16,287
		Total ..	1,058,129	1,591	1,404	1,191	1,358	1,227	1,627	1,800	1,441	1,173	1,412	1,317	1,331	16,872
4	Kamrup ..	Urban ..	59,651	105	55	39	61	55	55	55	144	55	69	55	58	806
		Rural	1,300,366	869	805	886	915	805	608	805	777	608	716	805	891	9,390
		Total.. ..	1,360,017	974	860	925	976	860	663	860	921	663	785	860	949	10,196
5	Darrang ..	Urban ..	14,643	45	34	23	32	41	49	48	40	72	54	58	38	534
		Rural	772,805	705	1,356	817	919	1,108	1,805	1,258	987	703	785	657	573	11,673
		Total ..	787,448	750	1,390	840	951	1,149	1,854	1,306	1,027	775	839	715	611	12,207
6	Nowgong ..	Urban ..	13,825	44	24	15	32	22	25	22	33	21	26	20	37	321
		Rural	746,379	636	666	795	578	849	717	830	453	506	487	514	557	7,588
		Total ..	760,204	680	690	810	610	871	742	852	486	527	513	534	594	7,909
7	Sibsagar ..	Urban ..	29,779	50	29	21	19	21	18	33	14	10	18	10	7	250
		Rural	1,092,099	995	1,159	1,021	1,283	976	1,647	1,359	1,415	1,259	1,214	1,006	1,043	14,377
		Total ..	1,121,878	1,045	1,188	1,042	1,302	997	1,665	1,392	1,429	1,269	1,232	1,016	1,050	14,627
8	Lakhimpur ..	Urban ..	39,358	34	42	26	22	31	32	52	71	34	56	49	32	481
		Rural	912,237	806	938	715	788	953	1,292	1,587	1,439	1,289	1,441	700	854	12,802
		Total ..	951,595	840	980	741	810	984	1,324	1,639	1,510	1,323	1,497	749	886	13,283
	Total for the towns		285,144	346	344	273	298	784	741	332	455	290	391	363	331	5,038
	Ratio per mille for towns		..	14·29	15·18	11·27	12·71	32·37	31·61	13·71	18·79	12·37	16·15	15·49	13·66	17·67
	Total for the rural circles ..		9,628,933	15,736	14,151	13,199	13,537	13,114	15,243	15,284	14,006	11,290	12,980	11,258	12,372	162,170
	Ratio per mille for the rural circle ..		..	19·36	18·49	16·14	17·10	16·03	19·26	18·9	17·13	14·27	15·87	14·22	15·13	16·84
	Total for the province		9,914.077	16,172	14,495	13,472	13,835	13,898	15,984	15,616	14,461	11,580	13,371	11,621	12,703	167,208
	Ratio per mille for the province ..		..	19·20	18·40	15·99	16·98	16·50	19·62	18·55	17·17	14·21	15·88	14·26	15·08	16·87

Ratios have been calculated with reference to number of days in each month. This table includes municipalities and small towns in which registration of vital statistics is compulsory.

STATEMETN No.IV

STATEMENT No. IV.—*Deaths registered according to age in the districts of (rural areas) and towns of Assam during the year 1944*

No.	A.—RURAL CIRCLES	Under 1 year — Not exceeding 1 month — Male — Under one week	Under 1 year — Not exceeding 1 month — Male — Over one week	Under 1 year — Not exceeding 1 month — Male — Total	Under 1 year — Not exceeding 1 month — Female — Under one week	Under 1 year — Not exceeding 1 month — Female — Over one week	Under 1 year — Not exceeding 1 month — Female — Total	Under 1 year — Not exceeding 1 month — Total	Over 1 month and not exceeding 6 months — Male	Over 1 month and not exceeding 6 months — Female	Over 1 month and not exceeding 6 months — Total	Over 6 months and not exceeding 12 months — Male	Over 6 months and not exceeding 12 months — Female	Over 6 months and not exceeding 12 months — Total	Under 1 year — Total — Male	Under 1 year — Total — Female	Under 1 year — Total — Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Cachar	387	352	739	317	232	549	1,238	448	369	817	228	243	471	1,415	1,161	2,576
2	Sylhet	1,847	1,173	3,020	1,385	1,032	2,417	5,437	2,069	1,720	3,789	1,447	1,381	2,828	6,536	5,518	12,054
3	Goalpara ..	320	272	592	210	179	413	1,005	712	527	1,239	577	476	1,053	1,881	1,416	3,297
4	Kamrup ..	102	86	188	56	81	137	325	213	202	415	181	169	350	582	508	1,090
5	Darrang ..	166	159	325	172	171	343	668	404	423	827	290	290	580	1,019	1,056	2,075
6	Nowgong ..	73	57	130	69	56	125	255	232	212	444	136	190	326	498	527	1,025
7	Sibsagar ..	328	273	601	274	242	516	1,117	340	327	667	260	273	533	1,201	1,116	2,317
8	Lakhimpur ..	167	234	401	143	190	333	734	330	300	630	258	277	535	989	910	1,899
	Total for rural circles.	..	..	..	..	..	..	..	..	..	..	..	..	..	14,121	12,212	26,333
	Ratio per mille ..	..	..	..	..	..	..	..	..	..	..	..	..	..	167·39	159 08	163·39

No.	A.—RURAL CIRCLES	1 and under 5 years — Male	1 and under 5 years — Female	5 and under 10 years — Male	5 and under 10 years — Female	10 and under 15 years — Male	10 and under 15 years — Female	15 and under 20 years — Male	15 and under 20 years — Female	20 and under 30 years — Male	20 and under 30 years — Female	30 and under 40 years — Male	30 and under 40 years — Female	40 and under 50 years — Male	40 and under 50 years — Female	50 and under 60 years — Male	50 and under 60 years — Female	60 and upwards — Male	60 and upwards — Female	Total of all ages — Male	Total of all ages — Female
1	2	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
1	Cachar	1,320	1,364	558	556	353	259	296	336	686	996	741	732	571	441	537	422	1,564	1,397	8,061	7,874
2	Sylhet	5,506	5,588	3,047	2,691	1,938	1,534	1,976	1,888	3,350	4,164	3,402	3,324	3,278	2,601	3,479	2,953	7,016	4,630	39,528	34,890
3	Goalpara ..	1,229	903	757	623	610	458	568	512	900	767	849	1,075	763	717	710	513	986	50	9,253	7,034
4	Kamrup ..	773	653	570	477	469	425	478	446	553	373	499	429	462	299	348	217	406	221	5,140	4,250
5	Darrang ..	1,036	1,029	594	514	344	305	263	310	442	676	610	628	476	442	519	420	565	435	5,868	5,806
6	Nowgong ..	682	712	425	371	251	192	219	221	372	434	423	379	404	273	331	256	391	227	8,966	3,592
7	Sibsagar ..	1,063	1,055	647	578	461	490	454	538	640	803	693	778	703	584	614	540	769	620	7,275	7,102
8	Lakhimpur ..	1,247	1,184	645	613	406	351	397	417	504	728	585	655	566	463	522	586	740	494	6,601	6,301
	Total for rural circles.	12,856	12,490	7,243	6,323	4,832	4,014	4,681	4,668	7,447	9,141	7,802	8,000	7,223	5,820	7,060	5,706	13,437	9,074	85,722	76,443
	Ratio per mille ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

	B.—TOWNS																																				
	Surma Valley																																				
1	Silchar ..	5	1	6	..	2	2	8	8	2	10	2	..	2	17	4	21	12	9	7	8	10	5	9	3	13	33	25	15	21	6	22	3	33	4	167	73
2	Hailakandi ..	2	1	3	1	1	2	5	3	2	5	..	..	..	6	4	10	4	3	1	4	..	..	6	..	4	4	5	1	5	5	6	..	5	1	42	24
3	Haflong ..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	1	1	..	1	..	2	..	..	..	..	..	1	1	..	1	1	8	1	1	1	6	8
4	Sylhet ..	4	8	12	3	1	4	16	10	11	21	8	8	16	30	23	53	30	25	12	7	3	2	5	9	19	14	9	53	17	9	15	7	53	37	191	156
5	Maulvibazar ..	2	..	2	2	..	2	4	1	..	1	..	..	..	3	2	5	5	2	1	2	1	..	..	..	4	5	2	3	4	8	2	1	13	6	5	33
6	Karimganj ..	5	10	15	7	7	14	29	16	19	35	8	7	15	39	40	79	33	62	12	16	4	6	10	7	17	30	20	18	18	13	12	13	48	19	213	226
7	Habiganj ..	7	1	8	6	3	9	17	9	9	18	4	3	7	21	21	42	29	34	7	3	3	1	2	4	6	15	4	7	15	7	11	4	24	16	125	110
8	Sunamganj ..	9	5	14	5	3	8	22	11	13	24	8	7	15	33	28	61	19	22	24	15	8	7	3	9	16	18	15	18	28	61	75	85	76	88	297	221
9	Srimangal ..	2	..	2	..	..	..	2	..	..	..	..	1	1	2	1	3	5	3	1	..	1	1	3	4	2	2	2	3	2	1	3	..	5	2	27	17
	Assam Valley																																				
1	Dhubri ..	3	5	8	9	5	14	22	5	5	10	..	1	1	13	20	33	18	11	9	8	10	3	4	8	24	11	24	6	21	5	10	6	13	26	146	104
2	Goalpara ..	3	5	8	3	5	8	16	8	6	14	8	4	12	24	18	42	17	8	18	8	11	7	9	4	12	10	14	7	11	5	9	3	16	4	141	74
3	Gauripur ..	5	2	7	3	3	6	13	6	1	7	3	6	9	16	13	29	12	7	4	5	3	4	1	..	5	6	2	6	4	5	5	4	9	9	61	59
4	Gauhati ..	2	2	4	3	2	5	9	4	10	14	6	5	11	14	20	34	34	24	19	10	13	13	13	17	79	26	38	20	21	7	19	15	10	7	260	159
5	Barpeta ..	..	..	..	2	1	3	3	7	2	9	4	3	7	11	8	19	20	39	3	9	22	8	7	14	10	6	14	4	11	10	15	3	8	21	121	122
6	Palasbari ..	1	..	1	..	..	..	1	2	3	5	..	3	3	3	6	9	8	1	..	7	2	2	6	3	1	3	5	1	1	..	..	1	2	..	26	24
7	Nalbari ..	..	..	..	..	..	..	..	4	4	8	..	..	..	4	4	8	6	4	9	9	12	6	9	6	5	6	6	3	1	2	3	3	..	..	53	41
8	Tezpur ..	7	..	7	4	4	8	15	9	8	17	2	4	6	18	20	38	11	12	8	12	4	6	10	9	65	36	79	11	61	14	33	16	50	31	319	157
9	Mangaldai ..	1	1	2	1	1	2	4	3	2	5	..	1	1	5	5	10	1	1	2	5	2	..	2	..	5	..	12	..	9	..	1	1	2	5	41	17
10	Nowgong ..	3	1	4	2	3	5	9	7	4	11	4	2	6	15	11	26	19	20	8	9	3	3	11	9	32	19	40	21	31	8	20	4	13	26	191	130
11	Jorhat ..	2	..	2	2	1	3	5	5	..	5	1	2	3	8	5	13	7	2	4	3	3	5	7	3	7	5	3	6	6	4	6	3	6	3	37	59
12	Sibsagar ..	1	2	3	..	..	..	3	1	..	1	1	..	1	5	..	5	3	5	2	2	1	1	..	1	..	4	..	3	1	3	3	4	..	1	18	24
13	Nazira ..	..	1	1	1	..	1	2	..	1	1	..	..	..	1	2	3	4	3	1	1	3	1	1	2	2	2	2	5	..	3	1	1	2	2	17	22
14	Golaghat ..	..	..	..	1	..	1	1	3	1	4	..	2	2	3	4	7	2	5	3	..	3	4	4	1	6	4	11	2	8	2	4	2	2	6	46	30
15	Dibrugarh ..	5	2	7	7	3	10	17	4	7	11	..	3	3	11	20		7	11	6	9	13	5	17	16	62	24	50	13	44	14	22	6	22	26	254	144
16	Tinsukia ..	..	1	1	..	1	1	2	1	2	3	2	1	3	4	4		3	3	..	..	2	..	2	1	5	1	6	..	6	..	1	..	3	1	32	10
17	Doom Dooma ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	2	1	..	..	..	..	..	..	3	3
18	North Lakhimpur	..	..	..	..	2	2	2	2	..	2	1	1	2	3	3	6	2	2	2	..	..	1	..	..	3	3	5	3	3	..	..	..	3	2	21	14
	Total for the towns.	..	..	..	..	..	..	..	..	..	..	..	..	..	309	287	596	311	322	163	149	137	89	137	129	406	267	394	200	350	138	301	157	399	343	2,907	2,131
	Ratio per mille ..	..	..	..	..	..	..	..	..	..	..	..	..	..	114·87	118·30	116·50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total for the province.	..	..	..	..	..	..	..	..	..	..	..	..	..	14,430	12,499	26,929	13,167	12,812	7,406	6,472	4,969	4,103	4,818	4,797	7,853	9,408	8,196	8,200	7,573	6,008	7,381	5,863	12,836	8,417	38,629	78,579
	Ratio per mille ..	..	..	..	..	..	..	..	..	..	..	..	..	..	165·77	157·78	161·95	19·49	18·49	10·49	10·16	8·28	7·70	11·18	10·92	8·46	10·47	10·49	13·98	15·15	12·13	27·40	29·82	78·95	64·48	16·87	16·06

STATEMENT No. IV(*a*)—*showing mortality under one year by classes*

Districts	Hindus		Muslims		Christians		Buddhists		Other classes	
	Number	Ratio per 1,000 births	Number	Ratio per 1,000 births	Number	Ratio per 1,000 births	Number	Ratio per 1,000 births	Number	Ratio per 1,000 births
Cachar	1,284	147·24	1,324	204·10	...	...	...	...	...	...
Sylhet	4,685	203·03	7,552	174·96	8	...	14	...	38	550·73
Goalpara	1,592	206·76	1,488	200·89	71	...	9	...	241	80·17
Kamrup	768	81·32	312	145·18	...	...	1	...	79	235·12
Darrang	1,637	185·89	254	241·21	94	...	1	...	137	183·17
Nowgong	621	117·92	318	151·79	6	...	...	...	106	130·22
Sibsagar	2,201	112·98	31	52·01	6	...	2	...	105	116·02
Lakhimpur	1,437	121·28	60	155·84	86	...	...	...	361	501·39
Total	14,225	150·62	11,339	179·03	271	149·88	27	891·34	1,067	161·42

STATEMENT No. V.—*Deaths registered according to class in the districts of Assam during the year 1944*

No.	Districts	Number of deaths registered																	
		Hindus			Muslims			Christians						Buddhists			Other classes		
								Europeans and Anglo-Indians			Total Christians								
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SURMA VALLEY																		
1	Cachar ..	4,880	4,508	9,388	3,359	3,136	6,495	..	..	..	10	10	20	..		..	27	25	52
2	Sylhet ..	16,036	12,069	28,105	24,345	23,635	47,980	..	..	..	6	6	12	..		..	29	33	62
	Total ..	20,916	16,577	37,493	27,704	26,771	54,475	..	..	..	16	16	32	..		..	56	58	114
	ASSAM VALLEY																		
3	Goalpara	3,806	3,078	6,884	4,367	3,226	7,593	..	..	..	226	270	496	9	2	11	1,193	695	1,888
4	Kamrup ..	4,238	3,372	7,610	1,079	996	2,075	...	.	..	..	..	..	..	..	..	283	228	511
5	Darrang ..	4,853	4,729	9,582	712	575	1,287	..	..	..	226	238	464	3	1	4	434	436	870
6	Nowgong	2,322	2,124	4,446	1,386	1,115	2,501	..	..	..	27	36	63	..	..	..	452	447	899
7	Sibsagar	6,763	6,607	13,370	202	198	400	40	33	73	40	34	74	10	12	22	395	366	761
8	Lakhimpur	5,957	5,572	11,529	374	246	620	1	..	1	198	194	392	11	22	33	371	338	709
	Total ..	27,939	25,482	53,421	8,120	6,356	14,476	41	33	74	717	772	1,489	33	37	70	3,128	3,510	5,638
	Total for the province	48,855	42,059	90,914	35,824	33,127	68,951	41	33	74	733	788	1,521	33	37	70	3,184	2,568	5,752

No.	Districts	Ratio of deaths per 1,000 of population														
		Hindus			Muslims			Christians			Buddhists			Other classes		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
	SURMA VALLEY															
1	Cachar ..	38·49	40·85	39·59	26·18	26·97	26·55	..	..	..	..	..	..	..	..	..
2	Sylhet ..	25·38	20·98	23·28	23·56	24·79	24·15	..	..	..	..	..	..	..	..	..
	Total ..	27·57	24·18	25·96	23·85	25·02	24·41	..	..	..	..	..	..	..	..	..
	ASSAM VALLEY															
3	Goalpara	21·67	21·09	21·41	16·75	13·93	15·42	..	..	..	..	..	..	..	..	..
4	Kamrup ..	10·78	9·96	10·40	5·25	5·52	5·38	..	..	..	..	..	..	..	..	..
5	Darrang ..	24·39	28·46	26·24	10·33	9·89	10·13	..	..	..	..	..	..	..	..	..
6	Nowgong	14·15	15·32	14·68	9·81	9·19	9·52	..	..	..	..	..	..	..	..	..
7	Sibsagar	18·75	21·00	16·79	6·62	8·29	7·36	..	..	..	..	..	..	..	..	..
8	Lakhimpur	20·69	23·39	21·91	12·67	14·22	13 25	..	..	..	..	.	..	..	..	..
	Total ..	17·68	18·99	18·28	11·02	10·04	10·57	..	..	..	..	..	..	..	..	..
	Total for the province	20·88	20·74	20·82	18·87	19·46	19·15	33·12	40·48	36·57	7·00	9·94	8·29	3·22	2·83	3·03

STATEMENT No. VI.—*Deaths registered from different causes in the districts and towns of the province of Assam during the year 1944*

No.	Districts and towns	Estimated Population	Births			Birth-rate	Deaths from—															Ratio of deaths per 1,000 of population										No.
													Injuries																	From all causes		
													Suicide																			
			Male	Female	Total		Cholera	Small-pox	Plague	Fevers	Dysentery and diarrhœa	Respiratory diseases	Male	Female	Wounds or accidents	Snakes	Wild animals	Rabies	Total	All other causes	Total	Cholera	Small-pox	Plague	Fevers	Dysentery and diarrhœa	Respiratory diseases	Injuries	All other causes	For the year	Mean of previous five years	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	DISTRICTS EXCLUDING TOWNS *Surma Valley*																															
1	Cachar ..	604,641	7,724	7,217	14,941	24·71	184	469	..	8,546	1,464	603	5	3	93	1	8	..	110	4,259	15,635	·30	·78	..	14·13	2·42	·99	·18	7·06	25·86	20·73	
2	Sylhet ..	3,177,871	34,107	30,761	64,868	20·41	2,991	6,357	..	45,278	4,209	798	35	37	564	6	20	8	670	14,115	74,418	·94	2·00	..	14·25	1·32	·25	·21	4·45	23·42	19·67	
	Total ..	3,782,512	41,831	37,978	79,809	21·10	3,175	6,826	..	53,824	5,673	1,401	40	40	657	7	28	8	780	18,374	90,053	·84	1·80	..	14·23	1·50	·37	·20	4·87	23·81	19·84	
	Assam Valley																															
3	Goalpara ..	1,022,535	9,600	8,444	18,044	17·65	118	439	..	15,347	67	86	5	2	21	..	5	1	34	196	16,287	·12	·43	..	15·01	·07	·08	·03	·19	15·93	20·39	
4	Kamrup ..	1,300,366	5,779	4,943	10,722	8·25	179	1,220	..	6,653	398	179	20	10	33	4	10	3	80	681	9,390	·14	·94	..	5·12	·31	·14	·06	·51	7·22	9·53	
5	Darrang ..	772,805	5,465	5,270	10,735	13·89	157	191	..	7,944	1,221	421	8	6	53	5	17	7	96	1,643	11,673	·20	·25	..	10·28	1·58	·54	·12	2·13	15·10	18·35	
6	Nowgong ..	746,379	4,280	3,771	8,051	10·79	270	1,673	..	4,673	310	83	12	4	32	5	7	3	63	516	7,588	·36	2·24	..	6·26	·41	·11	·08	·71	10·17	13·39	
7	Sibsagar ..	1,092.099	10,785	10,047	20,832	19·08	84	373	..	8,590	1,324	784	8	4	144	1	5	4	166	3,056	14,377	·08	·34	..	7·86	1·21	·72	·15	2·80	13·16	13·87	
8	Lakhimpur ..	912,237	6,619	6,348	12,967	14·22	15	597	..	5,728	1,451	1,228	28	13	175	11	46	21	294	3,489	12,802	·07	·65	..	6·28	1·59	1·35	·32	3·77	14·03	15·32	
	Total ..	5,846,421	42,528	38,823	81,351	13·91	823	4,493	..	48,935	4,771	2,781	81	39	458	26	90	39	733	9,581	72,117	·14	·77	..	8·37	·82	·48	·13	1·63	12·34	15·15	
	Total of districts excluding towns	9,628,933	84,359	76,801	161,160	16·74	3,998	11,319	..	102,759	10,444	4,182	121	79	1,115	33	118	47	1,513	27,955	162,170	·42	1·78	..	10·67	1·08	·43	·16	2·90	16·84	17·04	

	TOWNS																														
	Surma Valley																														
1	Silchar ..	17,778	120	85	205	11·53	1	24	..	64	41	18	1	..	11	..	..	..	12	80	240	·05	1·35	..	3·60	2·31	1·01	·67	4·51	13·50	13·11
2	Hailakandi ..	3,444	29	32	61	17·71	..	1	..	25	8	1	..	..	5	1	1	..	7	24	66	..	·29	..	7·26	2·32	·29	2·03	6·97	19·16	17·56
3	Haflong ..	1,588	14	10	24	15·11	..	1	..	4	..	..	..	..	..	..	..	..	..	9	14	..	·63	..	2·52	..	..	..	5·66	8·81	14·73
4	Sylhet ..	30,358	292	269	561	18·48	2	2	..	59	57	30	..	..	2	..	..	..	2	195	347	·07	·07	..	1·94	1·88	·98	·07	6·42	11·43	13·41
5	Maulvibazar	6,268	46	43	89	14·20	2	5	..	18	4	..	..	..	..	..	..	..	..	29	58	·32	·79	..	2·87	·64	..	..	4·63	9·25	7·51
6	Karimganj	8,520	138	99	237	27·81	6	76	..	232	15	9	..	..	5	..	1	..	6	95	439	·70	8·92	..	27·23	1·06	1·05	·70	11·86	51·52	13·76
7	Habiganj ..	13,283	111	120	231	17·39	8	26	..	90	22	3	..	..	5	..	..	..	5	81	235	·60	1·96	..	6·78	1·66	·23	·38	6·08	17·69	14·13
8	Sunamganj ..	8,204	157	133	290	35·35	49	66	..	121	14	5	..	1	2	..	..	..	3	360	618	5·97	8·04	..	14·75	1·71	·61	·37	43·87	75·32	14·14
9	Srimangal ..	2,853	31	17	48	16·82	..	4	..	15	7	3	..	..	1	..	..	..	1	14	44	..	1·40	..	5·25	2·45	1·05	·35	4·92	15·42	13·69
	Total ..	92,294	938	808	1,746	18·92	68	205	..	628	108	69	1	1	31	1	2	..	36	887	2,061	·74	2·22	..	6·80	1·82	·75	·39	9·62	22·34	13·35
	Assam Valley																														
10	Dhubri ..	21,495	169	136	305	14·19	3	17	..	95	28	13	..	1	10	1	..	..	12	82	250	·14	·79	..	4·42	1·30	·60	·56	3·82	11·63	14·97
11	Goalpara ..	8,253	123	122	245	29·69	..	17	..	109	8	17	..	..	7	..	..	..	7	57	215	..	2·06	..	13·21	·97	2·06	·85	6·54	25·69	20·19
12	Gauripur ..	5,846	68	48	116	19·84	..	2	..	75	5	3	..	..	..	..	..	..	..	35	120	..	·34	..	12·83	·86	·51	..	5·99	20·53	19·25
13	Gauhati ..	32,198	222	199	421	13·08	12	50	..	117	99	22	..	1	..	..	..	..	1	118	419	·37	1·55	..	3·63	3·07	·68	·03	3·68	13·01	12·34
14	Barpeta ..	20,030	248	249	497	24·81	..	20	..	97	25	4	..	..	3	1	..	..	4	93	243	..	·99	..	3·84	1·25	·20	·20	5·65	12·13	18·51
15	Palasbari ..	3,772	54	65	119	31·55	..	..	..	32	11	..	..	..	..	..	..	..	..	7	50	..	..	..	8·48	2·92	..	..	1·86	13·26	14·97
16	Nalbari ..	3,651	99	71	170	46·56	..	1	..	58	28	3	..	..	..	..	..	..	..	4	94	..	·27	..	15·88	7·67	·82	..	·11	23·75	15·35
17	Tezpur ..	12,416	121	124	245	19·73	1	27	..	80	132	85	..	..	16	..	..	..	16	135	476	·08	2·17	..	6·44	10·63	6·85	1·29	10·88	38·34	24·63
18	Mangaldai	2,227	20	26	46	20·66	..	3	..	17	8	2	..	..	3	..	..	..	3	25	58	..	1·35	..	7·63	3·59	·90	1·35	11·22	26·04	17·20
19	Nowgong ..	13,825	139	144	283	20·47	16	33	..	84	46	40	7	..	18	..	..	1	26	76	321	1·16	2·59	..	6·07	3·33	2·89	1·88	5·50	23·22	19·01
20	Jorhat ..	12,771	84	80	164	12·84	6	13	..	21	11	2	..	..	4	..	..	..	4	39	96	·47	1·02	..	1·64	·86	·16	·31	3·06	7·52	14·54
21	Sibsagar ..	7,856	40	29	69	8·78	1	3	..	11	1	2	..	..	1	..	..	1	2	19	39	·13	·38	..	1·40	·13	·25	·25	1·52	4·96	10·67
22	Nazira ..	3,422	45	36	81	23·67	1	..	..	22	2	6	..	..	..	..	..	..	..	8	39	·29	..	..	6·43	·58	1·75	..	2·34	11·39	12·55
23	Golaghat ..	5,730	46	22	68	11·87	..	5	..	48	6	4	..	..	5	..	..	..	5	8	76	..	·87	..	8·38	1·05	·70	·87	1·39	13·26	32·17
24	Dibrugarh ..	24,677	196	210	406	16·45	..	5	..	103	72	56	1	..	18	..	..	..	19	143	398	..	·20	..	4·17	2·92	2·27	·76	5·81	16·13	17·35
25	Tinsukia ..	9,398	53	24	77	8·19	..	4	..	11	3	6	..	..	5	..	..	..	5	13	42	..	·43	..	1·17	·32	·64	·53	1·38	4·47	6·89
26	Doom Dooma	2,270	1	2	3	1·32	..	..	..	3	1	2	..	..	..	..	..	..	..	..	6	..	..	..	1·32	·44	·88	..	..	2·64	6·02
27	North Lakhimpur.	3,013	24	31	55	18·25	1	4	..	13	2	2	..	..	2	..	..	..	2	11	35	·33	1·33	..	4·31	·66	·66	·66	3·66	11·61	13·52
	Total ..	192,850	1,752	1,618	3,370	17·47	41	204	..	996	488	269	8	2	92	2	..	2	106	873	2,977	·21	1·06	..	5·16	2·53	1·39	·55	4·54	15·44	15·22
	Total for the towns.	285,144	2,690	2,426	5,116	17·94	109	409	..	1,624	656	338	9	3	123	3	2	2	142	1,760	5,038	·38	1·43	..	5·69	2·30	1·19	·50	6·18	17·67	15·31
	Total for the province.	9,914,077	87,049	79,227	166,276	16·77	4,107	11,728	..	104,383	11,100	4,520	13	82	1,238	26	120	49	1,655	29,715	167,208	·41	1·18	..	10·53	1·12	·46	·17	3·00	16·87	16·99

SUPPLEMENTARY (OPTIONAL) STATEMENT VI(*a*) FOR THE YEAR 1944

Towns	Cerebro-spinal fevers		Typhus fevers		Malaria		Enteric fevers		Measles		Relapsing fevers		*Kala azar*		Influenza		Black water fever		Other fever		Dysentery		Diarrhoea		Pneumonia		Pulmonary Tuberculosis		Whooping cough		Other respiratory diseases	
	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio	Deaths	Ratio
	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
Silchar	3	..	..	..	20	..	8	..	1	..	..	..	..	..	..	..	..	..	32	..	26	..	15	..	9	..	4	..	..	..	5	..
Hailakandi	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	24	..	8	..	..	..	..	..	..	..	..	..	1	..
Haflong	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Sylhet	1	..	..	..	9	..	12	..	..	..	..	..	2	..	..	..	..	..	36	..	47	..	10	..	16	..	1	..	..	..	13	..
Maulvibazar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	4	..	..	..	..	..	..	..	..	..	..	..
Karimganj	..	..	..	..	10	..	1	..	1	..	..	..	..	..	..	..	..	..	220	..	10	..	5	..	4	..	2	..	..	..	3	..
Habiganj	..	..	..	..	15	..	1	..	11	..	..	..	1	..	..	..	..	..	62	..	15	..	7	..	2	..	1	..	..	..	..	..
Sunamganj	..	..	..	..	17	..	..	..	..	..	..	..	1	..	..	..	..	..	103	..	11	..	3	..	2	..	..	..	..	..	3	..
Srimangal	..	..	..	..	4	..	..	..	..	..	..	..	..	..	2	..	..	..	9	..	4	..	3	..	3	..	..	..	..	..	..	..
Dhubri	..	..	..	..	8	..	4	..	1	..	..	..	2	..	..	..	1	..	79	..	19	..	9	..	6	..	3	..	..	..	4	..
Goalpara	..	..	4	..	55	..	1	..	..	..	..	..	5	..	3	..	..	..	41	..	4	..	4	..	12	..	2	..	1	..	2	..
Gauripur	..	..	1	..	23	..	..	..	..	..	..	..	1	..	1	..	..	..	49	..	4	..	1	..	1	..	..	..	..	..	2	..
Gauhati	..	..	..	..	66	..	3	..	..	..	..	..	13	..	1	..	..	..	34	..	62	..	37	..	13	..	1	..	..	..	8	..
Barpeta	..	..	..	..	35	..	..	..	..	..	..	..	..	..	..	..	..	..	62	..	21	..	4	..	2	..	1	..	..	..	1	..
Palasbari	..	..	..	..	25	..	..	..	..	..	..	..	..	..	3	..	..	..	4	..	3	..	8	..	..	..	..	..	..	..	..	..
Nalbari	..	..	..	..	49	..	..	..	..	..	..	..	..	..	1	..	..	..	8	..	24	..	4	..	..	..	..	..	..	..	3	..
Tezpur	..	..	..	..	38	..	15	..	2	..	..	..	9	..	3	..	..	..	13	..	109	..	23	..	28		44	..	..	..	13	..
Mangaldai	..	..	..	..	1	..	..	..	..	..	1	..	6	..	..	..	..	..	9	..	6	..	2	..	..	..	1	..	..	..	1	..
Nowgong	..	..	2	..	30	..	10	..	4	..	..	..	8	..	..	..	..	..	30	..	29	..	17	..	26	..	8	..	..	..	6	
Jorhat	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	18	..	7	..	4	..	2	..	..	..	..	..	..	..
Sibsagar	..	..	..	..	4	..	..	..	..	..	2	..	..	..	..	..	..	..	5	..	1	..	..	..	1	..	1	..	..	..	..	..
Nazira	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	2	..	..	..	5	..	..	..	..	..	1	..
Golaghat	..	..	2	..	9	..	..	..	..	..	..	..	2	..	..	..	..	..	35	..	6	..	..	..	4	..	..	..	..	..	..	..
Dibrugarh	5	..	..	..	49	..	11	..	..	..	..	..	2	..	..	..	..	..	36	..	48	..	24	..	26	..	16	..	..	..	14	..
Tinsukia	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	1	..	2	..	3	..	2	..	..	..	1	..
Doom Dooma	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	..	..	1	..	..	..
North Lakhimpur	1	..	..	..	4	..	..	..	..	..	..	..	..	..	1	..	..	..	7	..	2	..	..	..	..	..	..	..	..	..	1	..

STATEMENT No. VII.—*Deaths registered from cholera in the districts of Assam during each month of the year 1944*

No.	Districts	Circles of Registration		Villages		January	February	March	April	May	June	July	August	September	October	November	December	Total			Ratio of deaths per 1,000 of population			Mean ratio of previous five years
		Number in each district	Number from which deaths from cholera were reported	Number in each district	Number from which deaths from cholera were reported													Male	Female	Total	Male	Female	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1	18	19	20	21	22	23	24	25
	Surma Valley																							
1	Cachar ...	13	10	1,335	64	42	14	13	24	49	22	11	...	1	...	5	4	102	83	185	·31	·28	·29	·63
2	Sylhet ...	43	41	17,099	1,003	886	502	379	194	312	169	130	60	31	18	70	307	1,557	1,501	3,058	·92	·97	·94	1·25
	Total ...	56	51	18,434	1,067	928	516	392	218	361	191	141	60	32	18	75	311	1,659	1,584	3,243	·82	·86	·84	1·15
	Assam Valley																							
3	Goalpara ...	20	14	3,784	78	20	7	6	5	5	6	4	33	29	5	1	...	44	77	121	·08	·16	·11	·69
4	Kamrup ...	19	14	2,839	415	3	6	3	21	21	10	31	52	31	10	6	7	94	97	191	·13	·15	·14	1·00
5	Darrang ...	15	12	2,330	113	4	8	4	13	24	49	6	8	23	12	7	...	75	83	158	·18	·22	·20	0·69
6	Nowgong ...	14	11	1,295	91	82	29	60	12	22	21	9	2	2	11	1	35	136	150	286	·33	·42	·38	1·50
7	Sibsagar ...	17	12	2,009	100	75	3	...	...	...	4	...	...	...	5	3	2	45	47	92	·08	·09	·08	·23
8	Lakhimpur ...	17	5	2,316	15	1	...	3	...	7	3	...	...	...	1	1	...	5	11	16	·01	·02	·02	·19
	Total ...	102	68	14,573	812	185	53	76	51	79	93	50	95	85	44	19	44	399	465	864	·12	·16	·14	·69
	Total for the province.	158	119	33,007	1,879	1,113	569	468	269	440	248	191	155	117	62	94	355	2,058	2,049	4,107	·39	·44	·41	·88

STATEMENT No. VIII.—*Deaths registered from small-pox in the districts of Assam during each month of the year 1944*

No.	Districts	Circles of Registration: Number in each district	Circles of Registration: Number from which deaths from small-pox were reported	Villages: Number in each district	Villages: Number from which deaths from small-pox were reported	January	February	March	April	May	June	July	August	September	October	November	December	Total: Male	Total: Female	Total: Total	Number of deaths among children: Under 1 year	Number of deaths among children: One to 10 years	Ratio of deaths per 1,000 of population: Male	Ratio of deaths per 1,000 of population: Female	Ratio of deaths per 1,000 of population: Total	Mean ratio of previous five years
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Surma Valley																									
1	Cachar ...	13	12	1,335	124	48	48	85	72	59	67	32	23	8	28	8	17	278	217	459	35	41	·84	·73	·79	·07
2	Sylhet ...	43	42	17,099	1,232	160	534	690	721	960	839	700	649	339	324	222	198	3,632	2,904	6,536	772	560	2·14	1·87	2·01	·27
	Total ...	56	54	18,434	1,356	408	582	775	793	1,019	906	732	672	347	352	230	215	3,910	3,121	7,031	407	601	1·93	1·69	1·81	·23
	Assam Valley																									
3	Goalpara ...	20	16	3,784	1,69	17	59	69	107	87	60	40	26	2	2	6	...	259	216	475	22	14	·46	·44	·45	0·15
4	Kamrup ...	19	17	2,839	1,101	168	131	116	104	131	52	126	83	52	118	131	79	624	667	1,291	1	...	·86	1·05	·95	·08
5	Darrang ...	15	14	2,330	97	11	26	30	50	58	19	15	3	1	1	...	7	120	101	221	6	26	·29	·28	·28	·05
6	Nowgong ...	14	12	1,295	224	99	212	304	197	340	181	168	48	78	70	6	3	877	829	1,706	225	432	2·15	2·35	2·24	·19
7	Sibsagar ...	17	14	2,009	103	30	18	14	18	2	58	17	14	5	39	30	149	219	175	394	18	51	·37	·33	·35	·02
8	Lakhimpur ...	17	15	2,316	180	55	60	28	76	153	68	136	8	...	4	...	22	340	270	610	26	30	·66	·62	·64	·03
	Total ...	102	88	14,573	1,879	380	506	561	552	771	438	502	182	138	234	173	260	2,439	2,258	4.697	298	553	·75	·80	·78	·06
	Total for the province.	158	142	33,007	3,235	788	1,088	1,336	1,345	1,790	1,344	1,234	854	485	586	403	475	6,349	5,379	11,728	705	1,154	1·21	1·15	1·18	·13

STATEMENT No. IX.—*Deaths registered from fevers in the districts of Assam during each month of the year 1944*

No.	Districts	Circles of registration: Number in each district	Circles of registration: Number from which deaths from fevers were reported	Villages: Number in each district	Villages: Number from which deaths from fevers were reported	January	February	March	April	May	June	July	August	September	October	November	December	Total: Male	Total: Female	Total: Total	Ratio of deaths per 1,000 of population: Male	Ratio of deaths per 1,000 of population: Female	Ratio of deaths per 1,000 of population: Total	Mean ratio of previous five years	No.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	SURMA VALLEY																								
1	Cachar	13	13	1,335	621	665	551	522	541	669	1,019	1,043	882	630	715	724	678	4,568	4,071	8,639	13·81	13·73	13·77	10·21	1
2	Sylhet	43	42	17,099	14,919	4,979	3,863	3,381	3,957	2,937	4,044	4,092	4,389	3,067	3,902	3,339	3,863	24,345	21,468	45,813	14·34	13·85	14·11	10·85	2
	Total ..	56	55	18,434	15,540	5,644	4,414	3,903	4,498	3,606	5,063	5,135	5,271	3,697	4,617	4,063	4,541	28,913	25,534	54,452	14·26	13·83	14·05	10·74	
	ASSAM VALLEY																								
3	Goalpara	20	19	3,784	2,328	1,501	1,280	1,044	1,191	1,085	1,501	1,699	1,332	1,116	1,343	1,274	1,260	8,907	6,719	15,626	15·83	13·56	14·77	18·35	3
4	Kamrup	19	18	2,839	*	585	570	703	713	569	459	569	596	459	451	571	714	3,865	3,092	6,957	5·32	4·88	5·12	6·85	4
5	Darrang	15	14	2,330	1,891	435	879	477	632	798	1,335	967	677	392	561	452	436	4,170	3,871	8,041	9·92	10·54	10·21	11·17	5
6	Nowgong	14	13	1,295	911	392	330	372	278	412	468	594	347	356	344	412	452	2,576	2,181	4,757	6·33	6·17	6·26	9·32	6
7	Sibsagar	17	16	2,009	754	595	754	614	780	557	1,087	882	787	796	717	577	546	4,466	4,226	8,692	7·50	8·03	7·75	8·16	7
8	Lakhimpur	17	17	2,316	475	307	379	336	322	382	735	860	640	796	628	192	281	3,125	2,733	5,858	6·08	6·24	6·16	7·84	8
	Total ..	102	97	14,573	6,359	3,815	4,192	3,546	3,916	3,803	5,585	5,569	4,379	3,915	4,044	3,478	3,689	27,109	22,822	49,931	8·40	8·11	8·27	8·22	
	Total for the Province	158	152	33,007	21,899	9,459	8,606	7,449	8,414	7,409	10,648	10,704	9,650	7,612	8,661	7,541	8,230	56,022	48,361	104,383	10·66	10·38	10·53	10·42	

*Not available.

STATEMENT No. X— *Deaths registered from Dysentery and Diarrhoea in the districts of Assam during each month of the year 1944*

No.	Districts	Circles of registration		Villages														Total			Ratio of deaths per 1,000 of population				No.
		Number in each district	Number from which deaths from Dysentery and Diarrhoea were reported	Number in each district	Number from which deaths from Dysentery and Diarrhoea were reported	January	February	March	April	May	June	July	August	September	October	November	December	Male	Female	Total	Male	Female	Total	Mean ratio of previous five years	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	SURMA VALLEY																								
1	Cachar	13	11	1,335	110	152	80	119	111	171	163	153	132	117	115	107	93	839	674	1,513	2·54	2·27	2·41	1·87	1
2	Sylhet	43	42	17,099	1,625	563	381	328	248	309	342	309	275	244	447	336	546	2,539	1,789	4,328	1·50	1·15	1·33	1·12	2
	Total ..	56	53	18,434	1,735	715	461	447	359	480	505	462	407	361	562	443	639	3,378	2,463	5,841	1·67	1·33	1·51	1·24	
	ASSAM VALLEY																								
3	Goalpara	20	16	3,784	58	16	14	12	11	17	4	8	5	7	10	4	..	65	43	104	·12	·09	·10	·25	3
4	Kamrup	19	18	2,839	408	59	50	35	63	50	25	50	66	25	59	50	29	329	232	561	·45	·37	·41	·39	4
5	Darrang	15	14	2,330	274	59	177	79	127	132	203	116	135	153	61	80	39	714	647	1,361	1·69	1·76	1·73	1·69	5
6	Nowgong	14	11	1,295	78	20	36	25	26	34	35	45	33	26	15	27	34	195	161	356	·48	·46	·47	·76	6
7	Sibsagar	17	16	2,009	52	76	78	97	108	94	127	127	172	146	121	121	77	709	635	1,344	1·19	1·21	1·20	1·56	7
8	Lakhimpur	17	17	2,316	115	67	73	71	89	137	134	182	232	137	193	107	107	772	757	1,529	1·50	1·73	1·61	1·59	8
	Total ..	102	92	14,573	985	297	428	319	424	464	528	528	643	494	459	389	286	2,784	2,475	5,259	·86	·88	·87	1·00	
	Total for the province..	158	145	33,007	2,720	902	889	766	783	944	1,033	990	1,050	855	1,021	832	925	6,162	4,938	11,100	1·17	1·06	1·12	1·09	

STATEMENT No. XI.—*Deaths registered from Respiratory diseases in the districts of Assam during each month of the year 1944*

No.	Districts	Circles of Registration: Number in each district	Circles of Registration: Number from which deaths from respiratory diseases were reported	Villages: Number in each district	Villages: Number from which deaths from respiratory diseases were reported	January	February	March	April	May	June	July	August	September	October	November	December	Total: Male	Total: Female	Total: Total	Ratio of deaths per 1,000 of population: Male	Ratio of deaths per 1,000 of population: Female	Ratio of deaths per 1,000 of population: Total	Mean ratio of previous five years	No.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	SURMA VALLEY																								
1	Cachar ..	13	12	1,335	102	67	55	69	55	46	43	53	46	41	54	43	50	341	281	622	1·03	·95	·99	1·19	1
2	Sylhet ..	43	41	17,099	1,154	107	77	94	55	96	61	59	55	34	72	48	90	552	296	848	·32	·19	·26	·38	2
	Total ..	56	53	18,434	1,256	174	132	163	110	142	104	112	101	75	126	91	140	893	577	1,470	·44	·31	·38	·51	
	ASSAM VALLEY																								
3	Goalpara ..	20	16	3,784	7	14	21	16	13	7	13	4	11	3	5	9	3	83	36	119	·15	·07	·11	·21	3
4	Kamrup ..	19	16	2,839	159	18	17	7	11	17	25	17	6	25	28	17	20	114	94	208	·20	·19	·19	·19	4
5	Darrang ..	15	12	2,330	77	57	41	67	48	22	51	44	52	37	27	31	31	305	203	508	·73	·55	·64	·72	5
6	Nowgong ..	14	11	1,295	33	17	9	7	14	12	5	2	4	7	10	26	10	76	47	123	·19	·13	·16	·23	6
7	Sibsagar ..	17	16	2,009	92	50	50	61	56	89	79	89	74	70	85	44	51	433	365	798	·73	·69	·71	·89	7
8	Lakhimpur ..	17	17	2,316	43	126	118	73	62	53	58	101	306	166	107	69	55	623	671	1,294	1·21	1·53	1·36	1·23	8
	Total ..	102	88	14,573	411	282	256	231	204	200	231	257	453	308	262	196	170	1,634	1,416	3,050	·51	·50	·51	·57	
	Total for the province.	158	141	33,007	1,667	456	388	394	514	342	335	369	554	383	388	287	310	2,527	1,993	4,520	·48	·43	·46	·55	

STATEMENT No. XII.—*Deaths registered from plague in the districts of Assam during each month of the year 1944*

No.	Districts	Circle of Registration		Villages														Total			Ratio of deaths per 1,000 of population				No.
		Number in each district	Number from which deaths from plague were reported	Number in each district	Number from which deaths from plague were reported	January	February	March	April	May	June	July	August	September	October	November	December	Male	Female	Total	Male	Female	Total	Mean ratio of previous 5 years	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Surma Valley																								
1	Cachar ...	13	...	1,335	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2	Sylhet ...	43	...	17,099	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
	Total ...	56	...	18,434	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Assam Valley																								
3	Goalpara ...	20	...	3,784	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
4	Kamrup ...	19	...	2,839	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5	Darrang ...	15	...	2,330	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
6	Nowgong ...	14	...	1,295	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
7	Sibsagar ...	17	...	2,009	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
8	Lakhimpur ...	17	...	2,316	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
	Total ...	102	...	14,573	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Total for the Province.	158	...	33,007	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

APPENDIX II

PROVINCIAL

Statement showing details of registration in compulsory areas

Compulsory registration area	Estimated Population	Estimated births at 288 per 1,000 married women between the ages of 15 and 40	Number of births registered during the year	Estimated birth-rate per mille	Registered birth-rate per mille	Number of deaths registered during the year		Death-rate per mille		Number of prosecutions under Act IV (B. C.) of 1873	Number of convictions
						Including deaths in hospitals	Excluding deaths in hospitals	Including deaths in hospitals	Excluding deaths in hospitals		
1	2	3	4	5	6	7	8	9	10	11	12
Silchar ...	17,778	Not available	205	Not available	11·53	240	133	13·50	7·48	...	...
Hailakandi ...	3,444		61		17·71	66	51	19·16	14·80	...	...
Haflong ...	1,588		24		15·11	14	1	8·81	...	...	...
Sylhet ...	30,358		561		18·48	347	267	11·43	8·78	24	24*
Maulvibazar ...	6,268		89		14·20	58	45	9·25	7·18	...	...
Karimganj ...	8,520		237		27·81	439	409	51·52	48·00	...	...
Habiganj ...	13,283		231		17·39	235	211	17·69	15·88	19	18*
Sunamganj ...	8,204		290		35·35	618	580	75·32	70·69	...	...
Srimangal ...	2,853		48		16·82	44	44	15·42	15·42	...	...
Dhubri ...	21,495		305		14·19	250	188	11·63	8·74	...	...
Goalpara ...	8,253		245		29·69	215	182	25·69	22·05	...	...
Gauripur ...	5,846		116		19·84	120	120	20·53	20·53	...	...
Gauhati ...	32,198		421		13·08	419	114	13·01	3·54	...	...
Barpeta ...	20,030		497		24·81	243	214	12·13	10·68	...	...
Palasbari ...	3,772		119		31·55	50	50	13·26	13·26	...	...
Nalbari ...	3,651		170		46·56	94	94	23·75	23·75	...	...
Tezpur ...	12,416		245		19·73	476	362	38·34	29·15	7	7*
Mangaldai ...	2,227		46		20·66	58	29	26·04	13·02	...	...
Nowgong ...	13,825		283		20·47	321	206	23·22	14·90	9	9*
Jorhat ...	12,771		164		12·84	96	32	7·52	2·50	...	...
Sibsagar ...	7,856		69		8·78	39	13	4·96	1·85	...	...
Nazira ...	3,422		81		23·67	39	39	11·39	11·39	...	...
Golaghat ...	5,730		68		11·87	76	42	13·26	7·32	...	...
Dibrugarh ...	24,677		406		16·45	398	146	16·13	5·91	...	...
Tinsukia ...	3,013		77		8·19	42	24	4·47	2·55	...	...
Doom Dooma...	2,270		3		1·32	6	6	2·67	2·64	...	...
North Lakhimpur.	9,398		55		18·25	35	25	11·61	8·33	...	...
Total ...	285,144		5,116		17·94	5,038	3,826	17·67	13·41	...	...

*These were detected in 1943 but tried and convicted in 1944.

APPENDIX III

Leper Asylum and Colonies—The table below gives the detail of the patient treated in the existing Leper Institution in the Province

Names of the Institutions	Remaining from the previous year	Admission during the year	Total	Discharged cured	Discharged otherwise	Died	Remaining at the end of the year
1	2	3	4	5	6	7	8
1. Leper Asylum Sylhet	105	66	171	...	53	5	113
2. ,, ,, Gauhati	50	50	100	...	7	71	22
3. ,, ,, Borpeta	21	9	30	3	7	1	19
4. ,, ,, Imphal	80	19	99	1	4	...	95
5. ,, ,, Maibang	38	2	40	...	...	1	39
6. ,, Colony Tura	113	36	149	...	30	10	109
7. ,, ,, Santipara, Goalpara (Mission)	294	78	372	5	4	237	126
8. ,, ,, Pasighat	31	5	36	...	6	...	30
9. ,, ,, Alipur, Cachar (Mission)	12	3	15	1	2	...	12
10. ,, ,, Borbheta, JorhaMis- n sio	120	20	140	4	4	2	130
11. ,, Ward Dhubri ...			Not received				

Districts	Meternity and Child-Welfare Centres maintained by—						Staff					
	Government		Local and Municipal bodies		Other Agencies		Trained visitors		Trained midwives		Trained dhais	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	2	3	4	5	6	7	8	9	10	11	12	13
Cachar	..	..	..	..	1	..	..	..	2	..	3	3
Sylhet	..	..	..	..	2	1	..	..	9	11	2	2
Goalpara	..	..	1	1	1	..	..	..	2	1	2	5
Kamrup	..	..	..	..	..	1	..	..	..	..	..	1
Darrang	..	..	2	..	1	..	1	..	2	..	..	..
Nowgong	..	..	..	..	..	..	..	..	..	..	..	..
Sibsagar	..	..	..	..	1	..	1	..	..	..	..	..
Lakhimpur	..	..	..	..	..	..	..	..	1+1	1	..	..
Khasi and Jaintia Hills ..	..	..	..	..	1	..	1	..	..	..	..	..
Naga Hills	..	..	..	..	..	..	..	..	..	..	..	..
Lushai Hills	..	..	..	..	..	..	..	..	..	..	..	..
Garo Hills	..	..	..	..	1	..	..	..	1	..	..	.
Sadiya Frontier Tract ..	..	..	..	..	..	..	..	..	..	..	..	..
Manipur State	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	3	1	8	2	3	..	18	13	7	11

Table showing Public Health Services in Rural and Urban Areas in Assam during 1944

Districts	Rural areas: Medical Officers of Heath: Holding D.P.H.: Whole time	Rural: Holding D.P.H.: Part time	Rural: Licentiate (L.P.H.): Whole time	Rural: Licentiate (L.P.H.): Part time	Rural: Epidemic unit staff	Rural: Sanitory Inspector	Rural: Vaccinators: Male	Rural: Vaccinators: Female	Rural: School Medical Officers	Rural: Other health staff	Urban areas: Medical Officers of Health: Holding D.P.H.: Whole time	Urban: Holding D.P.H.: Part time	Urban: Licentiate (L.P.H.): Whole time	Urban: Licentiate (L.P.H.): Part time	Urban: Sanitory Inspectors and Urban Health Officers	Urban: Vaccinators: Male	Urban: Vaccinators: Female	Working both in Urban and Rural areas: Rural Health Inspectors and Assistant Rural Health Inspectors	Both: School Medical Officers	Both: Other staff
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Cachar	..	..	..	..	2 S.A.Ss.	..	34	..	..	..	..	..	..	..	1	1	..	5 R.H.Is. 3 A.R.H.Is.	..	1 D.M.O.H. 1 S.D.M.O.H.
Sylhet	..	..	..	..	8 ,,	..	176	..	..	..	..	..	..	..	3	7	..	21 R.H.Is. 9 A.R.H.Is.	..	1 D.M.O.H. 4 S.D.M.Os.H. 26 S.A.Ss.
Goalpara	..	..	..	..	2 ,,	..	37	..	..	..	..	..	..	..	1	3	..	5 R.H.Is. 4 A.R.H.Is.	..	1 D.M.O.H. 1 S.D.M.O.H. 7 S.A.Ss.
Kamrup	..	..	..	..	3 ,,	..	79	..	..	..	..	..	..	..	1	3	..	7 R.H.Is. 1 A.R.H.Is.	..	1 D.M.O.H. 1 S.D.M.O.H. 9 S.A.S.
Darrang	..	..	..	..	2 ,,	..	43	1	..	..	..	..	*1	..	*1	2	..	5 R.H.Is. 1 A.R.H.Is.	..	1 D.M.O.H. 1 S.D.M.O.H. 4 S.A.Ss.
Nowgong	..	..	..	..	2 ,,	..	62	..	..	..	..	..	..	..	1	1	..	8 R.H.Is. 2 A.R.H.Is.	..	1 D.M.O.H. 13 S.A.Ss.
Sibsagar	..	..	..	..	3 ,,	..	48	..	..	..	..	..	..	..	1	4	..	3 R.H.Is. 5 A.R.H.Is.	..	1 D.M.O.H. 2 S.D.M.Os.H. 11 S.A.Ss.
Lakhimpur	..	..	..	..	2 ,,	..	55	..	..	..	..	..	..	..	1	2	..	8 R.H.Is.	..	1 D.M.O.H. 1 S.D.M.O.H.
Khasi and Jaintia Hills ..	..	..	..	..	1 ,,	..	10	..	..	..	1	..	..	..	1	2	..	2 R.H.Is.	..	1 A.S.I/C.P.H. Laby. 1 S.A.S.
Naga Hills	..	..	..	..	1 ,,	..	5	..	..	..	..	..	..	..	..	2	..	2 R.H.Is.	..	..
Lushai Hills..	..	..	..	..	1 ,,	..	8	..	..	..	..	..	..	..	..	..	..	3 R.H.Is.	..	..
Garo Hills	..	..	..	..	1 ,,	..	7	..	..	..	..	..	..	..	..	..	..	1 R.H.Is. 1 A.R.H.I.	..	2 S.A.Ss.
Sadiya Frontier Tract ..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	..	..
Manipur State	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 I.V. and 1 S.I.V.

VACCINATION

STATEMENT NO. 1

A.—VACCINE DEPARTMENT

VACCINATION STATEMENT No. I.—*Showing particulars of vaccination in the province of Assam during the year 1944*

No.	Districts or towns	Estimated population	Primary vaccination including Secondary — Successful — Under one year	Successful — One to five years	Successful — Five to ten years	Successful — Total	Unsuccessful	Total including unverified primary and secondary vaccination	Re-vaccination — Successful	Re-vaccination — Unsuccessful	Re-vaccination — Total including unverified vaccination	Total operations including unverified operations	Percentage of success among the verified operations — Primary *plus* Secondary	Percentage of success — Re-vaccination	Successfull vaccinated children under one year as a percentage of total live births during the year
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	A.—DISTRICTS (EXCLUDING TOWNS)														
	Surma Valley and Hill Division														
1	SilcharS ubdivision	311,178	1,698	11,347	3,811	16,856	255	17,221	21,703	11,459	35,838	53,059	98·51	65·44	22·94
2	Hailakandi Subdivision	132,350	525	5,047	874	6,446	27	6,599	12,901	2,803	16,775	23,374	99·58	82·15	12·98
3	Haflong Subdivision	37,359	187	1,304	653	2,144	73	2,411	2,094	1,077	4,588	6,999	96·71	66·08	..
4	Sylhet Subdivision	649,047	2,223	9,350	666	16,871	1,294	19,534	16,499	14,886	40,580	60,114	92·87	52·57	15·49
5	Karimganj Subdivision	521,940	5,119	34,852	17,680	58,251	444	60,146	67,589	32,297	116,417	176,563	99·24	67·67	48·20
6	Maulvibazar Subdivision	431,996	9,739	39,645	2,407	51,791	2,562	58,223	76,470	14,611	104,321	162,544	95·28	83·96	95·00
7	Habiganj Subdivision	703,362	3,764	30,333	2,359	36,456	977	38,658	49,198	12,536	72,105	110,763	97·39	79·82	25·75
8	Sunamganj Subdivision	667,903	2,710	17,802	4,909	25,489	2,079	32 214	29,725	26,273	73,412	105,626	92·46	53·08	24·99
9	Shillong Subdivision	215,175	3,850	8,829	3,081	15,760	8	15,768	20,284	22,903	40,403	62,171	95·95	46·97	..
10	Jowai Subdivision	87,361	2,668	3,087	2,234	6,989	5	6,994	1,670	1,494	3,548	10,542	99·93	52·78	..
11	Naga Hills District	189,484	1,115	2,930	1,479	5,530	311	6,992	8,387	3,498	19,034	26,026	94·67	70·57	..
12	Lushai Hills District	162,246	1,037	3,660	1,784	6,481	1,079	9,001	5,028	3,398	8,393	17,394	85·76	59·67	..
	Total of Surma Valley and Hill Division	4,109,401	33,635	168,186	41,937	249,064	9,111	273,761	311,548	147,235	541,414	815,175	96·47	67·92	..

	Assam Valley Division														
13	Dhubr Subdivision	715,364	3,573	10,444	4,313	20,881	767	24,012	41,272	14,887	65,622	89,634	96·46	73·49	25·77
14	Goalpara Subdivision	300,147	2,600	1,874	1,649	7,093	463	7,829	18,710	10,524	32,615	40,444	93·87	64·00	63·77
15	Gauhati Subdivision	813,184	2,214	9,480	1,370	13,069	1,349	16,947	24,668	18,379	63,729	80,226	90·64	57·30	27·48
16	Barpeta Subdivision	478,725	3,000	12,211	6,269	21,480	1,201	24,469	31,088	13,175	56,211	80,680	94·71	70·23	..
17	Tezpur Subdivision	307,668	2,700	6,136	1,596	10,694	351	11,234	42,698	15,914	62,789	74,023	96·82	72·85	70·77
18	Mangaldai Subdivision	313,203	3,296	7,833	1,530	12,813	684	13,769	42,925	6,658	53,721	67,490	94·93	86·59	68·42
19	Nowgong Subdivision	720,515	8,497	22,256	7,786	38,539	2,282	41,877	96,171	50,913	168,959	210,836	94·41	65·38	..
20	Jorhat Subdivision	288,589	1,251	4,965	1,283	7,499	524	8,777	12,551	11,565	27,486	36,263	93·47	52·08	40·65
21	Sibsagar Subdivision	295,050	400	8,148	969	9,517	305	10,247	6,959	8,549	24,048	34,295	96·89	44·87	8·78
22	Golaghat Subdivision	229,585	2,178	7,344	1,688	11,210	591	14,240	14,310	4,800	28,116	42,356	94·99	74·88	55·53
23	Dibrugarh Subdivision	415,389	1,394	9,472	1,640	12,506	311	12,960	17,876	12,442	32,916	45,876	97·57	58·96	88·22
24	North Lakhimpur Subdivision	200,937	..	..	..	..	..	..	15,776	3,998	20,545	20,545	·00	94·05	..
25	Garo Hills District	231,410	3,790	2,123	404	6,327	625	7,483	3,997	2,270	7,340	14,823	91·01	63·78	..
	Total of Assam Valley Division	5,309,766	34,893	102,286	30,497	171,623	20,253	193,394	369,001	174,074	644,097	837,491	89·44	67·95	..
26	Manipur State*	534,222	6,676	4,473	1,987	13,130	2,766	18,010	16,140	5,418	25,875	43,885	82·59	74·86	..
27	Sadiya Frontier Tract	61,084	401	423	220	1,044	264	1,974	1,439	1,003	3,668	5,642	79·81	58·93	..
28	Balipara Frontier Tract	6,857	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total of the districts	10,021,330	75,599	275,368	74,641	434,861	32,394	487,139	698,128	327,730	1,215,054	1,702,193	93·07	68·05	..

*Include Imphal town also

A.—VACCINE DEPARTMENT

VACCINATION STATEMENT No. I.—*Showing particulars of Vaccination in the Province of Assam during the year 1944*

No.	Districts or Towns	Estimated population	Primary vaccination including secondary — Successful — Under 1 year	1 to 5 years	5 to 10 years	Total	Unsuccessful	Total including unvarified primary and secondary vaccination	Re-vaccination — Successful	Unsuccessful	Total including unvarified operations	Total operations including unvarified operations	Percentage of success samong the verified operations — Primary plus secondary	Re-vaccination	Successfully vaccinated children under one year as a percentage of total live births during year
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	B. TOWNS *Surma Valley and Hill Division*														
1	Silchar	17,778	131	46	..	177	8	216	404	1,745	3,852	4,068	95·66	18·80	63·90
2	Hailakandi	3,444	24	69	23	116	..	116	1,293	350	1,868	1,984	100·00	78·69	82·75
3	Haflong	1,588	4	10	..	14	3	17	160	75	273	290	82·35	68·08	28·57
4	Sylhet	30,358	265	167	11	443	8	472	837	3,013	4,287	4,759	98·22	21·74	47·27
5	Karimganj	8,520	158	96	54	308	23	348	2,375	1,032	3,422	3,770	93·05	69·71	66·66
6	Maulvi Bazar	6,268	67	105	10	182	..	182	1,340	492	2,152	2,334	100·00	73·14	75·28
7	Srimangal	2,853	18	60	1	79	..	79	367	60	506	585	100·00	85·95	37·50
8	Habiganj	13,283	19	116	25	160	..	160	526	782	1,423	1,583	100·00	43·54	8·22
9	Sunamganj	8,204	51	169	103	364	64	456	564	217	870	1,326	83·10	72·21	17·58
10	Shillong	43,822	190	133	6	329	..	329	..	..	2,588	2,917	100·00	·00	28·78
11	Jowai	Not available	30	63	7	160	..	100	54	68	122	222	100·00	44·26	53·57
12	Kohima	3,757	36	40	..	76	15	94	66	..	66	160	83·51	100·00	..
	Total of Surma Valley and Hill Division	139,873	993	1,074	240	2,348	121	2,569	7,986	7,834	21,429	23,998	95·10	50·48	

	Assam Valley Division														
13	Dhubri	21,495	208	216	99	564	..	564	4,296	367	4,704	5,268	100·00	92·13	68·19
14	Goalpara	8,253	116	5	..	121	..	121	..	..	142	263	100·00	·00	47·34
15	Gauripur	5,846	50	25	..	75	3	79	503	762	1,294	1,373	96·15	36·76	43·10
16	Gauhati	32,198	87	147	8	242	..	242	1,190	580	2,329	2,571	100·00	63·22	20·66
17	Barpeta	20,030	158	246	1	405	2	409	646	267	1,416	1,825	99·51	70·75	31·79
18	Palashbari	3,772	12	50	..	62	..	62	491	85	646	708	100·00	85·24	10·08
19	Nalbari	3,651	26	72	5	103	1	112	308	166	758	870	99·04	64·98	15·29
20	Tezpur	12,416	91	56	..	147	1	148	792	844	2,452	2,600	99·32	48·41	37·14
21	Mangaldai	2,227	8	8	1	21	..	21	54	9	114	135	100·00	85·71	17·39
22	Nowgong	13,825	163	227	4	394	3	397	3,281	2,075	5,386	5,783	99·24	61·26	57·59
23	Jorhat	12,771	114	26	..	140	..	140	640	7,691	8,484	8,624	100·00	7·68	69·61
24	Sibsagar	7,856	22	42	9	73	8	81	69	408	477	558	90·12	14·46	31·88
25	Gotaghat	5,730	61	82	9	152	8	160	832	434	1,412	1,572	95·00	65·72	89·70
26	Nazira	3,422	2	53	2	57	13	70	25	121	158	228	81·43	17·12	2·47
27	Dibrugarh	24,677	154	66	..	220	7	227	1,144	659	2,049	2,276	96·91	63·44	37·93
28	Tinsukia	9,398	64	147	..	211	1	212	679	615	1,390	1,602	99·53	52·47	83·12
29	Doom Dooma	2,270	3	15	..	18	..	18	180	110	296	314	100·00	62·06	100·00
30	North Lakhimpur	3,013	15	..	..	15	..	15	..	..	..	15	100·00	·00	27·27
31	Tura	3,091	16	24	..	40	..	40	65	19	84	124	100·00	87·84	30·19
	Total of Assam Valley Division	195,941	1,370	1,507	138	3,060	47	3,118	15,195	15,212	33,591	36,709	98·49	49·97	..
32	Imphal	Not avaliable	..	..	..	..	..	..	..	..	..	..	..	..	..
33	Sadiya	1,286	51	35	20	106	22	150	323	582	942	1,092	82·81	35·69	..
	Total of Towns	337,100	2,414	2,616	398	5,514	190	5,837	23,504	23,628	55,962	61,799	96·65	49·87	..
	Total of Vaccine Department	10,021,330	78,013	277,984	75,039	440,375	32,584	492,976	721,632	351,358	1271,016	1,763,992	93·11	67·25	..
	Total of Dispensary staff	..	262	1,204	259	1,741	174	1,875	1,587	849	2,858	4,733	90·91	65·14	..
	Total of Tea Gardens	1,132,801	7,954	7,962	3,014	20,198	1,602	22,058	57,166	20,398	78,769	100,827	92·65	73·70	..
	Total of Jails, Mental Hospital, Police Hospitals and Infectious diseases hospitals.	..	265	1,385	616	2,303	121	2,726	5,422	3,756	12,799	15,525	95·00	59·07	..
	Total of Railway Dispensaries	..	304	1,271	1,333	2,908	3,021	12,463	3,723	6,347	10,331	22,794	49·04	36·97	..
	Total of private Medical Practitioners	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Shillong Vaccine Depôt	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Grand total	11,491,231	86,798	289,806	80,261	467,525	37,502	532,098	789,530	382,708	1375,773	1,907,871	92·57	67·35	..

B.—DISPENSARY VACCINATION

STATEMENT No. II.—*Showing Dispensary Vaccination in the Province of Assam during the year 1944*

Districts	Primary vaccination						Re-vaccination			Total operations including unverified operations	Percentage of success among the verified operations		Percentage of unknown cases to the total cases	
	Successful					Total including unverified primary or secondary vaccination	Successful	Unsuccessful	Total including unverified vaccination		Primary *plus* secondary	Re-vaccination	Primary *plus* secondary	Re-vaccination
	Under one year	One to five years	Five to ten years	Total	Successful									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cachar	10	17	...	27	...	27	76	151	251	278	100·00	35·02	·00	9·56
Sylhet	105	914	227	1,246	27	1,273	760	272	1,071	2,344	97·88	73·64	·00	3·64
Khasi and Jaintia Hills	31	44	...	75	...	117	107	...	173	290	100·00	100·00	·00	·00
Naga Hills	...	45	...	5	9	60	60	38	98	158	85·00	61·22	·00	·00
Lushai Hills	1	3	4	8	2	20	208	20	260	280	80·00	91·23	50·00	12·31
Goalpara	8	49	13	70	...	72	76	34	119	191	100·00	69·09	2·78	7·56
Kamrup	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Darrang	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nowgong	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sibsagar	...	...	...	...	...	...	50	150	200	200	...	·25	...	·00
Lakhimpur	...	...	...	...	...	...	24	95	139	139	...	20·16	...	14·38
Garo Hills	79	117	11	207	26	239	216	86	531	770	88·84	71·52	1·25	43·12
Manipur State	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sadiya Frontier Tract	28	25	4	57	10	67	10	3	16	83	85·67	76·92	·00	18·75
Balipara Frontier Tract	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Total	262	1,214	259	1,741	74	1,875	1,587	849	2,858	4,733	95·92	65·15	3·20	14·76

	Total number of operations performed		Percentages of successful cases in which the results were known		Number of children successfully vaccinated			Number of all successful vaccinations performed
	Primary *plus* secondary	Re-vaccination	Primary *plus* secondary	Re-vaccination	Under one year	One to five years	Five to ten years	
1	2	3	4	5	6	7	8	9
By special staff—								
Districts excluding towns	487,139	1,215,054	93·07	68·05	75,599	275,368	74,641	1,132,989
Towns	5,837	55,962	96·65	49·87	2,414	2,616	398	29,018
Total	492,976	1,271,016	93·11	67·25	78,013	277,984	75,039	1,162,007
By Railway dispensary	12,463	10,331	49·04	36·97	340	1,271	1,333	6,631
By private Medical Practitioners	...	...	...	...	...	...	...	...
By Dispensaries staff	1,875	2,858	90·91	65·14	262	1,204	259	3,328
By other agencies,— Tea Gardens, Jails, hospitals, etc.	24,784	91,568	92·88	72·15	8,219	9,347	3,630	85,089
Total	39,122	104,757	84·66	68·41	8,785	11,8[illegible]2	5,222	95,048
Shillong Vaccine Depot	...	...	...	...	...	...	...	...
Grand total	532,098	1,375,773	92·57	67·35	86,798	289,806	80,261	1,257,055

STATEMENT No. III

Showing the number of persons primarily vaccinated with the number of those who were successfully vaccinated in each of the under-mentioned years

Vaccinating Agents	Persons primarily vaccinated																			
	1935-36		1936-37		1937-38		1938-39		1939-40		1940-41		1941		1942		1943		1944	
	Total number	Number successfully vaccinated	Total number	Number succersfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated	Total number	Number successfully vaccinated
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17.	18	19	20	21
Government	37,114	28,573	49,047	37,407	39,926	32,576	42,329	35,388	44,460	37,356	52,832	47,645	50,291	44,388	58,903	45,467	55,015	50,774	81,832	73,067
Dispensaries	5,091	3,359	2,388	1,839	1,694	1,204	1,655	1,431	2,694	2,007	1,644	1,415	807	721	2,437	825	1,328	1,158	1,875	1,741
Municipal	9,926	9,481	5,897	5,485	6,776	6,299	6,775	6,486	8,369	7,746	7,284	6,922	6,873	6,505	5,856	5,258	6,791	6,461	5,491	5,248
Local Funds	325,199	293,466	323,815	272,546	237,418	297,724	359,457	325,249	365,770	338,620	353,740	331,699	338,159	313,466	333,769	292,881	286,808	260,916	387,643	348,830
Licensed Vaccinators	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Apprentices	260	251	1,202	1,168	782	705	2,631	2,231	394	388	99	99	..	..	1,900	1,800	..	..	..	..
Native States	15,599	1,285	24,445	19,908	16,955	13,328	17,470	14,500	17,386	14,028	18,720	15,065	20,240	16,311	17,468	13,732	16,400	12,362	18,016	13,130
Tea Gardens	..	..	30,628	28,022	33,835	31,326	32,838	32,546	31,910	29,717	33,908	32,520	38,111	36,145	35,332	32,686	58,162	54,919	22,058	20,198
Jails, Mental Hospital, Police Hospitals and Infectious diseases hospitals and Government vaccination in Lakhimpur.	..	..	152	120	122	68	19	5	76	61	67	51	234	197	108	67	289	242	2,726	2,303
Railway Dispensaries	..	..	343	326	509	471	626	608	512	488	459	428	459	398	353	287	1,240	1,055	12,463	2,908
Total ..	393,189	336,415	437,917	366,821	438,017	383,701	463,800	418,444	471,571	430,417	468,717	435,844	455,174	418,131	456,126	393,093	426,033	387,887	532,098	467,525

STATEMENT IV.—*Showing the number of Vaccinations performed in Municipal towns on children unde one year of age during the year 1944*

Districts	Towns	Number of births during the year	Number of deaths among children under one year during the year	Number of successful vaccinations on children under one year during the year	Date of extension of Vaccination Act to town
1	2	3	4	5	6
Cachar	Silchar ...	205	21	131	21st January 1892.
	Hailakandi ...	61	10	24	10th November 1922.
Sylhet	Sylhet ...	561	53	265	1st October 1882.
	Habiganj ...	231	42	19	11th December 1913.
	Sunamganj ...	290	61	51	28th June 1915.
	Karimganj ...	237	79	158	27th July 1915.
	Maulvibazar ...	89	5	67	16th April 1916.
	Srimangal ...	48	3	18	9th October 1936.
Khasi and Jaintia Hills.	Shillong ...	660	31	190	21st June 1895.
	Total of Surma Valley and Hill Division.	2,382	305	923	
Goalpara ...	Dhubri ...	305	33	208	13th February 1891.
	Goalpara ...	245	42	116	12th November 1890.
	Gauripur ...	116	29	50	15th September 1922.
Kamrup ...	Gauhati ...	421	34	87	August 1882.
	Barpeta ...	497	19	158	29th October 1915.
	Palashbari ...	119	9	12	16th November 1927.
	Nalbari ...	170	1	26	9th August 1940.
Darrang ...	Tezpur ...	245	38	91	22nd May 1907.
	Mangaldai ...	46	10	8	12th October 1916.
Nowgong ...	Nowgong ...	283	26	163	7th April 1897.
Sibsagar ...	Sibsagar ...	69	5	22	21st January 1892.
	Jorhat ...	164	13	114	12th April 1892.
	Golaghat ...	68	7	61	24th March 1892.
	Nazira ...	81	3	2	1st December 1916.
Lakhimpur ...	Dibrugarh ...	406	31	154	September 1883.
	Doom Dooma ...	3	...	3	21st October 1918.
	Tinsukia ...	77	8	64	31st August 1922.
	North Lakhimpur	55	6	15	22nd June 1932.
	Total of the Assam Valley Division.	3,370	321	1,354	

STATEMENT No. V.—*Showing side by side the ratio (per 1,000 of population) of deaths from small-pox and the number of successful vaccinations during the ten years ending 1944*

	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations	Ratio of deaths from small-pox	Number of successful vaccinations
	1935-1936		1936-1937		1937-1938		1938-1939		1939-1940		1940-1941		1941-1941		1942		1943		1944	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Cachar..	..	28,069	·06	28,725	·11	33,434	..	26,863	..	25,321	·002	26,986	·003	36,211	·04	41,354	·31	98,196	·79	89,361
Sylhet	·04	122,728	·25	143,670	·66	167,689	·48	183,301	·66	218,437	·25	137,160	·08	130,780	·05	122,019	·20	231,091	2·01	450,475
Khasi and Jaintia Hills ..	·007	21,296	..	18,992	..	18,384	..	22,983	..	33,128	·04	48,875	·22	41,282	·03	37,843	·71	45,940	·05	45,368
Naga Hills	..	7,951	..	13,140	..	13,380	..	12,015	..	12,667	..	9,605	..	9,108	·03	5,755	1·17	24,208	..	14,177
Lushai Hills	..	3,113	..	3,083	..	9,156	..	6,508	..	5,469	..	6,663	..	7,494	·02	9,230	..	8,894	·04	11,725
Goalpara	·002	56,281	·003	65,624	·008	54,503	·002	61,342	·02	57,025	·009	54,526	·003	51,576	·04	42,280	·03	51,699	·45	94,565
Kamrup	·26	82,942	·27	55,250	·12	48,556	·08	53,034	·12	62,953	·08	71,807	·05	63,406	·01	56,343	·11	63,201	·95	96,532
Darrang	·05	42,799	·06	49,973	·04	26,107	·04	45,829	·12	46,018	·02	45,711	·01	53,057	·01	65,911	·06	95,035	·28	122,843
Nowgong	·04	51,159	·06	52,967	·35	44,612	·54	45,930	·12	42,547	·06	40,320	·04	39,906	..	33,611	·69	87,226	2·24	142,700
Sibsagar	·13	44,429	·02	42,484	·006	33,770	·03	40,405	·07	38,519	..	45,691	·001	57,286	..	50,423	·02	125,342	·35	80,345
Lakhimpur	·003	32,652	·003	29,148	·006	29,811	·01	30,011	·01	31,540	·01	35,257	·001	40,687	..	45,702	·10	131,679	·64	65,363
Garo Hills	·01	13,852	..	11,484	·005	10,268	..	11,766	·04	12,312	·005	12,680	..	12,771	..	11,197	·08	12,022	·96	10,852
Manipur State	·35	29,127	·39	30,042	·22	21,462	·01	19,973	..	19,168	..	20,072	..	20,859	..	23,427	..	28,125	·21	29,270
Sadiya Frontier Tract ..	..	8,529	..	2,980	..	2,763	..	2,273	..	3,161	..	3,663	·07	6,610	..	3,277	..	5,289	..	2,979
Balipara Frontier Tract ..	..	667	..	456	..	366	..	488	..	396	..	1,553	..	600	..	388	..	380	..	
Total	·07	545,596	·12	547,928	·25	514,261	·19	562,681	·23	608,661	·09	560,569	·03	571,633	·03	558,760	·17	1.008,327	1·05	1,257,055

STATEMENT NO. VI.—*Showing the vaccinal conditions of Small-pox patients admitted to hospitals during the year 1944.*

Age	Vaccinated as evidenced by presence of one or more vaccination cicatrices		Stated to have been successfully vaccinated but no vaccination cicatrix present	Stated to be unvaccinated (or vaccinated unsuccessfully) and no vaccination cicatrix present	Previously unvaccinated but vaccinated during incubation of Small-pox	Stated to have been successfully re-vaccinated	
	Within the last five years	More than five years previously				Within the last five years	More than five years previously
1	2	3	4	5	6	7	8
Under 1 year	1	...	...	...	...	...	...
1 ,,	2	...	1	1	1	...	...
2 ,,	1	...	...	...	...	...	...
3 ,,	2	...	...	2	1	...	...
4 ,,	2	...	...	...	1	...	...
5 ,,	2	...	1	1	2	...	...
6 ,,	2	...	2	2	...	...	...
7 ,,	1	...	...	2	...	...	...
8 ,,	1	1	...	2	...	...	...
9 ,,	1	...	...	2	...	...	...
10 ,,	1	1	...	3	1	...	...
11 ,,	...	...	...	...	...	...	...
12 ,,	1	2	1	2	1	1	...
13 ,,	...	...	...	...	...	...	...
14 ,,	2	2	2	...	...	...	...
15 ,,	8	1	2	...	...	2	...
20 ,,	9	6	8	12	1	3	6
25 ,,	9	12	10	10	...	9	7
30 ,,	18	11	9	10	...	8	8
35 ,,	10	11	6	7	...	2	2
40 ,,	8	5	1	4	...	4	3
50 ,,	7	1	2	6	1	2	1
60 ,,	5	...	2	2	...	...	...
70 ,,	...	...	...	...	...	...	...
80 and upwards	...	...	1	...	...	...	...
Total ...	88	53	48	68	9	31	27

A. G. P. (D.P.H.) No. 8—340—2-12-1946.

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

Resolution on the Public Health Report for 1944

Extract from the proceedings of the Government of Assam in the Medical Department, Public Health Branch, No. MPH. 144/45/7, dated the 7th September 1946.

Read—The Public Health Report for 1944.

RESOLUTION

1. Climatic conditions showed marked variations. The average rainfall was somewhat lower and th temperatures higher than the respective normals. Local flooding occurred in some areas of the Sylhet District. The Agricultural operations generally proceeded well, resulting in a fair crop. Prices of the necessities of livelihood remained high throughout the year, and though the prices of agricultural produce went up further, the agriculturist could not profit much proportionately as the middle men continued to take a large share. The sum total of all these factors is reflected in the general health of the people.

2. The collection of vital statistics continued in the same way as before, except that the returns which used formerly to be compiled in the offices of the Civil Surgeons, began to be compiled in the offices of the District Medical Officers of Health, which posts were created in connection with the re-organisation of the Public Health Department with effect from the 1st April 1944. The post war scheme for the collection of vital statistics is under the consideration of the Government. The birth-rate (16·77 per mille) during the year showed a further fall from that (19·06) in the previous year; and the death-rate (16·74 per mille) showed an increase over the previous year's rate (16·34). The districts of Cachar and Sylhet recorded death rates above the quinquennial average of 16·99, while the remaining districts were below it. The highest death-rate (46·12) in rural areas was in the Baniyachang Circle in the Sylhet district, due to the continuance of the malaria epidemic which first broke out in 1942. The rate of child mortality after showing a decline for several years, showed a sharp increase during the year; and the rise is perhaps due to the cumulative effects of disturbed conditions arising out of the war, and to the scarcity of protective foods. But the general high rates of child mortality prevailing during the past years, point to the need for a properly organised system of pre-natal care, and maternity and child welfare work, which are at present hampered for lack of funds.

3. Of the diseases causing death during the year, the chief are Fevers, Dysentery and Diarrhœa, Cholera and Small-pox.

Fevers.—Deaths from 'Fever' are mainly due to malaria and other diseases having fever as the predominant symptom. As already mentioned a large toll of life was taken by the malaria epidemic at Baniyachang. Quinine and other anti-malaria drugs continued to be supplied to the indigent malaria patients in the badly affected areas of the province. The Assam Medical Research Society, which directed its work mainly to Malaria, continued its useful work. The activities of the Society suffered on account of its lending the Malaria Research Officer to the Public Health Department of the Provincial Government for employment as Malariologist in connection with the Malaria epidemic at Baniyachang.

Kala-Azar.—Kala-Azar, which showed signs of recrudescence since 1937 and reached the peak in 1940, appeared to be on the decline during the year, though this could not be confirmed by survey works which could not be effectively maintained on account of the paucity of qualified doctors as a result of the deputation of a large number of them to military duty, and to the non-availability of suitable substitutes in their places.

Cholera.—The incidence of cholera during the year was low, the number of deaths from it being 4,107 against 15,454 of the previous year. The epidemic which broke out in 1943 continued till the early part of 1944, during which the incidence of the disease was comparatively higher.

Small-pox.—During the year Small-pox was prevalent in epidemic form throughout the province; the district of Sylhet where the disease seems to be endemic, being the worst sufferer. The number of deaths from Small-pox during the year was 11,728 against 1,692 in the previous year.

Dysentery and Diarrhœa.—The number of deaths from these increased slightly during the year. A total of 11,100 persons died from these diseases against 10,577 in the previous year.

4. *Leprosy.*—A total of 786 leprosy cases was treated in the Public Health Department Dispensaries. As a result of the survey undertaken by the Special Leprosy Officer in an area of the Goalpara District 157 cases of Leprosy was detected and a Public Health Department Dispensary with an out-centre was opened for the treatment of the detected cases. As before the Missionaries and the British Empire Leprosy Association did excellent Anti-Leprosy work which Government again take the opportunity to appreciate. The Post-War Anti-Leprosy Scheme is under the consideration of Government.

5. *Tuberculosis.*—The Provincial Tuberculosis Association maintained steady progress in its activities. Accommodation at the Lady Reid Chest Hospital at Shillong was raised from 28 to 47. A second Clinic named the Bijoyendra Clinic was also opened at Dibrugarh and it did good work.

6. *Maternity and Child Welfare.*—The good work done by the Red Cross Society in this sphere was continued during the year. There is still no recognised institution for the training of midwives within the province. The training centres at Sylhet and Silchar provide courses of Dhais.

7. *Food Adulteration.*—Due to the war the supply of articles of food-stuffs was generally short, and adulteration was high. The administration of the Assam Pure Food Act, 1932, which lies with the Local Bodies still remained far from satisfactory.

8. *Sale of Quinine.*—The sale of quinine and its substitutes remained under Government control under the supervision of the Director of Public Health. Considering all circumstances the province got a fair supply of quinine and other anti-malaria drugs. Quinine and Cinchona being in short supply efforts were made to popularise Mepacrine in place of Quinine or Cinchona.

9. *Public Health Administration.*—The year 1944 saw the fulfilment of the long-standing need of the Department for its re-organisation. As a consequence of the re-organisation which affected the eight plain districts of the province, the control of Public Health activities passed from the hands of the Civil Surgeons to the District Medical Officers of Health, who were made directly responsible to the Assistant Directors of Public Health. To cope with the increase of work that would follow the re-organisation of the Department a third permanent post of Assistant Director of Public Health with headquarters at Jorhat was created. Government hope that the Director of Public Health will take full advantage of the re-organisation in improving the Public Health activities of the province.

Government take this opportunity of thanking Major T. D. Ahmad for his efficient administration of the Department.

ORDER—Ordered that the Resolution be published in the *Assam Gazette* for general information.

By order of the Governor of Assam,

A. H. S. FLETCHER,

Secretary to the Government of Assam.